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SCHOOLS



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DOWN with promotion and stunting! Let principals be limited to their legitimate function! Let teachers make their appeal through their subjects instead of striving for outside contacts!

Malcolm Scott Hallman, principal of Washington Senior High School, Cedar Rapids, Iowa, makes the foregoing plea in the leading article in *THE NATION'S SCHOOLS* for September. As things now stand, he charges, it is scarcely respectable for a principal to be engaged in instructional leadership. It is professional suicide for a teacher to be interested solely in his subject matter. "Salvaging Secondary Schools" is the title of the article.

NEW DEAL largesse is bringing about school plant improvements on a stupendous scale. A member of the technical board of review of the PWA, David Cushman Coyle, will present in the next issue his views on industrial and economic trends. Mr. Coyle knows that school buildings are constructed to meet the needs of a social order not yet born but he can only guess what the social order will be. Fascism, he sees as a way station on the road to chaos. Communism, like the later stages of laissez-faire, tends to intellectual regimentation and social inflexibility, he believes. So, even in face of odds, Mr. Coyle favors the New Deal.

"MENACES of the Adolescent Period" — that is the title of a health article that no junior or senior high school teacher or executive will turn past when he meets it in the September number. A learned man of medicine is the author, Dr. George Crile of Cleveland Clinic.

Doctor Crile holds that it lies within the power of the teacher to regulate the pupil's activities so as to guard the susceptible unit of the great energy or kinetic system. It is fitting, he points out, that this should be so,

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for our present systems of education are an expression of our civilized state, and our civilized state has depended upon the rise of the brain and the thyroid gland. Probably no one knows more about the thyroid gland than does this physician, whose thyroidectomies are said to number in the thousands.

KEEPING the textbook list up to date is simple under the free textbook system. Dr. Frank Jensen, the former superintendent, will review in the next issue fourteen years' experience of the Rockford (Ill.) Public Schools under the free text plan. Patrons, teachers and pupils approve it without exception. The initial cost was \$5.14 a pupil. Without this provision, heavy purchases for indigent pupils would have had to be made during the depression years. Children now have more books for each subject than it would be possible for their parents to purchase for them.

TWO practical articles coming in the School Plant section are Ray L. Hamon's "Trends in Types of School Seating," and Samuel Gaiser's "Organizing a School Supply Service Agency." Mr. Hamon's study covers eight years' sales of school seats—the boom years when a million pupil seating units were sold annually and the depression years when a little less than half the business was done. Professor of school administration at George Peabody College, Mr. Hamon has made his study with the cooperation of the Washington office of the Public Seating Industry.

As superintendent of supplies for the board of education in Newark, N. J., Mr. Gaiser is in a position to give facts on a subject too little treated—the selection, purchase and delivery of equipment and supplies. Efficiency requires the existence of a distinct supply service agency, even in the small rural district when it may involve employment in a dual capacity, this author asserts.

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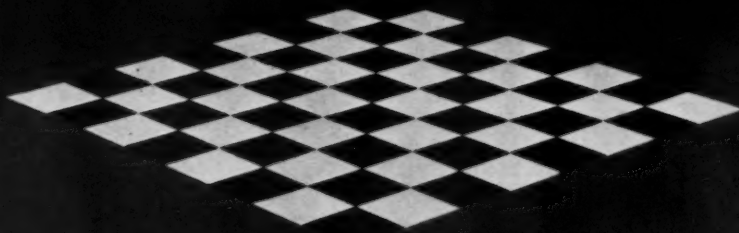
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At New York Street Grade School Kindergarten, Lawrence, Kans., the black and white Linotile game board is built into the dent-resisting, sound-absorbing floor of Armstrong's Linoleum, in brown, black and white.



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THE NATION'S SCHOOLS

DEVOTED TO THE APPLICATION OF RESEARCH TO THE
BUILDING, EQUIPMENT AND ADMINISTRATION OF SCHOOLS

VOLUME 16

AUGUST, 1935

NUMBER 2

Looking Forward . . .

THE state of Michigan lost one of its outstanding educational leaders, the cause of public education in the United States a staunch exponent, and *THE NATION'S SCHOOLS* an unusually gifted staff member, when a totally unnecessary automobile accident resulted on June 22 in the unexpected death of Maurice R. Keyworth near Sault Sainte Marie, Mich. Doctor Keyworth was superintendent-elect of public instruction for Michigan and was to have taken office on July 1. Much was expected of his administration in the reorganization of public education in Michigan.

To those who were intimate with him, his greatest achievement will be the unusually capable administration of the public schools of Hamtramck, Mich. Considered among the poorest in the state, he completely revolutionized them in a decade until at the time of his death they were outstanding not only in the state but also nationally as an impressive achievement in the integration of two cultures into the American pattern with a minimum of conflict and of disintegration.

Doctor Keyworth was a keen student of anthropology and sociology. He recognized the fundamental difficulties in attempting forcibly to change cultural patterns. His program was based upon the necessity for the education of the entire community—adult as well as youth. When language difficulties intervened in the process of understanding he sought integrating values in music and dramatics. The public schools became a

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... Protect the Teacher From Ex-
ploitation... Teachers Are Wor-
thy of Recognition... Summer Ses-
sions Reflect Improving Conditions
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dynamic and vital part of community life. So thoroughly were these people of foreign birth imbued with the value of the schools that during the darkest days of the depression they did not fail to pay their teachers. Family activity was seriously curtailed but the community did not curtail its schools! These schools stand today as his monument—an achievement more impressive than marble.

One of the outstanding leaders in the state, he fought hard for greater state support made necessary by changing conditions. He was one of a small group who strove to bring before the people of Michigan the vital values inherent in their schools. So well did he and his colleagues succeed that the current legislature with little difficulty passed a bill providing a fund of approximately \$40,000,000 (including the state primary school

fund). With this appropriation the Michigan public schools are beginning to come out of the woods. The problems of teacher training and administrative reorganization were planned as the major program for the next four years. His untimely death may retard to a considerable extent the progress of public education in the Wolverine state.

Thoroughly imbued with an unquenchable zeal for the democratic tradition and a staunch believer in the democratic way of life, Doctor Keyworth exemplified in the highest degree that type of sturdy and clear-visioned leadership now so essential in this country. Clearheaded, cool in emergencies, honest and kindly, courageous against real odds and never refusing battle, he moved in the footsteps and in the patterns of the Great Emancipator whose earnest disciple he was.

Watch the Little Things

Since the beginning of public transportation from home to school progressive attempts have been made to make school busses safe for children. Innumerable statutes have been passed in the several states concerning mechanical specifications, type of vehicle, distinctive colors, methods of financing and support. Yet accidents continue and numerous deaths are reported annually.

While many of these accidents are probably due to combinations of circumstances, it is obvious that a great share of the responsibility rests with the driver. The human element is the most significant in this situation. Little attention has been paid to the qualifications of bus drivers or to their physical fitness either in statute enactment or in actual selection. Accidents are not infrequently reported with a descriptive sentence or two calling brief attention to physical inadequacies of the driver. Men with wooden legs or minus an arm are not satisfactory drivers for children. Men whose eyesight is poor and whose general physical condition has been permanently affected by disease or accident are exceptionally poor risks.

There is immediate need of stringent standards of physical and mental fitness for school bus drivers. Since many local communities still consider driving the school bus a patronage job, it may be essential that general mandatory statutes be enacted on a statewide basis to lift these personnel from the realm of political consideration. If all school districts owned and operated their busses instead of contracting for this service they might have better control over type of personnel. Certainly child lives should be placed far above sentimental, commercial or political values.

While the more careful selection of school bus personnel will help considerably in reducing the accident factor, there will always be a minimum risk. Grade crossings, low visibility, road conditions, traffic factors and mechanical problems must be considered. Every bus should be mandatorily equipped with a first aid kit of sufficient size to provide means for meeting emergencies that may arise.

The Final Accounting

In the dreary and dark days of the depression from which public education is now happily emerging, the Joint Commission on the Emergency in Education was appointed in February, 1933, to act for the profession in making inquiry "into the difficulties, financial and otherwise, which the schools were encountering, and to take action to end these difficulties."

At the Denver, 1935, meeting of the National Education Association the Joint Commission, considering properly that the acute emergency had been passed and that the future required different treatment, made its final accounting and requested its honorable dismissal. As a final recommendation it suggested that a permanent Educational Policies Commission be created to act as a planning commission to "be responsible for the development and execution of a long-term program."

The profession owes a serious debt of gratitude to the ten members who gave so much of their time and unselfish support to the attempt to solve the knotty questions raised by the emergency. The task confronting the commission was not easy. There were disorganization and discouragement everywhere. In our estimation the most notable achievement of the group was the development of counter-propaganda against the efforts of those groups who shortsightedly lashed out at everything in sight in their despair to "do something" about the depression. The public opinion aroused in the several states through commission stimulus and leadership formed a protecting wall against which deliberate as well as unintentional efforts to contract and cripple the public schools fell. They stopped the charge and held the breach, supplementing further their efforts by allowing the states to build a secondary line that moved quickly forward after the first surge failed.

The members of the commission, Lotus D. Coffman, J. B. Edmonson, Sidney B. Hall, Mrs. Blanche White, Mrs. F. Blanche Preble, A. J. Stoddard, A. L. Threlkeld, Herbert S. Weet, David E. Weglein, and John K. Norton, chairman, deserve a definite place on the honor roll of "distinguished service to public education."

Action Is Desirable

The reported determination of certain members of the large regional accrediting bodies to recommend the investigation of the exploitation of teachers by certain marginal private schools should be encouraged by every member of the profession. While it is true that private boarding schools have suffered terrifically as a result of the depression, there appears to be little excuse for the exploitation of teachers by the entrepreneurs in some of these educational ventures. There is sufficient evidence that in certain institutions teachers were given the choice of working for board and housing or not working. In other instances salaries have been deliberately reduced to welfare levels "because so many teachers are available."

The quality of teaching possible under these conditions must be low — pitifully low. In defense of the private school it must be said that these exploiting institutions are greatly in the minority. Upon the whole, privately supported schools have attempted by every means at their disposal not only to maintain but to improve the quality of personnel during the last five years. Salary cuts, made only where absolutely essential, paralleled those in public education.

The only real control over these institutions lies in the power of the regional accrediting associations. If they continue mildly to pass over these conditions, nothing can be done about it. A rigid investigation of living conditions for teachers in certain types of schools will quickly disclose the fact that these exploitative units should be summarily warned to mend their ways. If they refuse their accredited status may be quickly changed. If it is a crime to give an apple to an athlete it should be at least a misdemeanor to force a teacher and his family to starvation wages.

The Colleges Fail Again

A survey of the June, 1935, honorary degrees dispensed by colleges and universities again fails to disclose that these higher institutions have given consideration to the teaching profession or felt it desirable to honor outstanding leaders in elementary and secondary education. The wreaths and the diplomas went to those whose chief merit lay in their position, generally a matter of accident, or their achievement and their potentiality for institutional support. Some few university teachers were recognized.

The urge for publicity, so apparent in our once stately institutions of higher learning since their employment of "high-pressure press boys" as pub-

licity counselors, seems rather out of keeping with the fundamental worth of their work. However, if the universities desire to cheapen themselves and grasp the hazy and gossamer value of the front page by trading a degree for a story, it is presumably their right. It is also the full and perfect right of a public to read between the lines and weigh the issues. It does, however, seem too bad that not one first-class institution is willing to establish a policy and do honor annually to two or three of the outstanding public school teachers and administrators within its area.

Out of the Doldrums

Most convincing evidence that public education has emerged from the doldrums of the depression is indicated by early reports on summer school enrollment. Attendance at these vacation sessions fell off abruptly during the second year of the depression when a shortened school year and cashless pay days made professional life uncertain. Much to the surprise of administrative officials, 1935 enrollments rapidly surpassed the two previous years' totals and swept in some instances into new attendance records.

Some of this increase may be accounted for by special groups attending school under FERA subsidy, which may not be repeated. Even without these special divisions there was a general healthy enlargement worthy of comment. No better illustration of optimism is available than the actual investment of slender resources in extension of essential training. The reaction of teachers and administrators is based upon sound premises — general state legislative action for improved school support.

Iowa Chief Is Honored

Agnes Samuelson, state superintendent of public instruction for Iowa, was chosen president of the National Education Association at the 1935 Denver meeting. Miss Samuelson succeeds Dean Henry Lester Smith of Indiana University, under whose administration important changes in the secretariat were effected. In honoring the head of the Iowa state educational system, the National Education Association gives well deserved recognition to conscientious effort and leadership in attempting to develop public education in Iowa. It is fondly hoped that President Samuelson will carry into her administration a sane aggressiveness in the protection of teachers' rights.

The Editor



Physical exercises are a part of the program of the Piccole and Giovani Italiane.

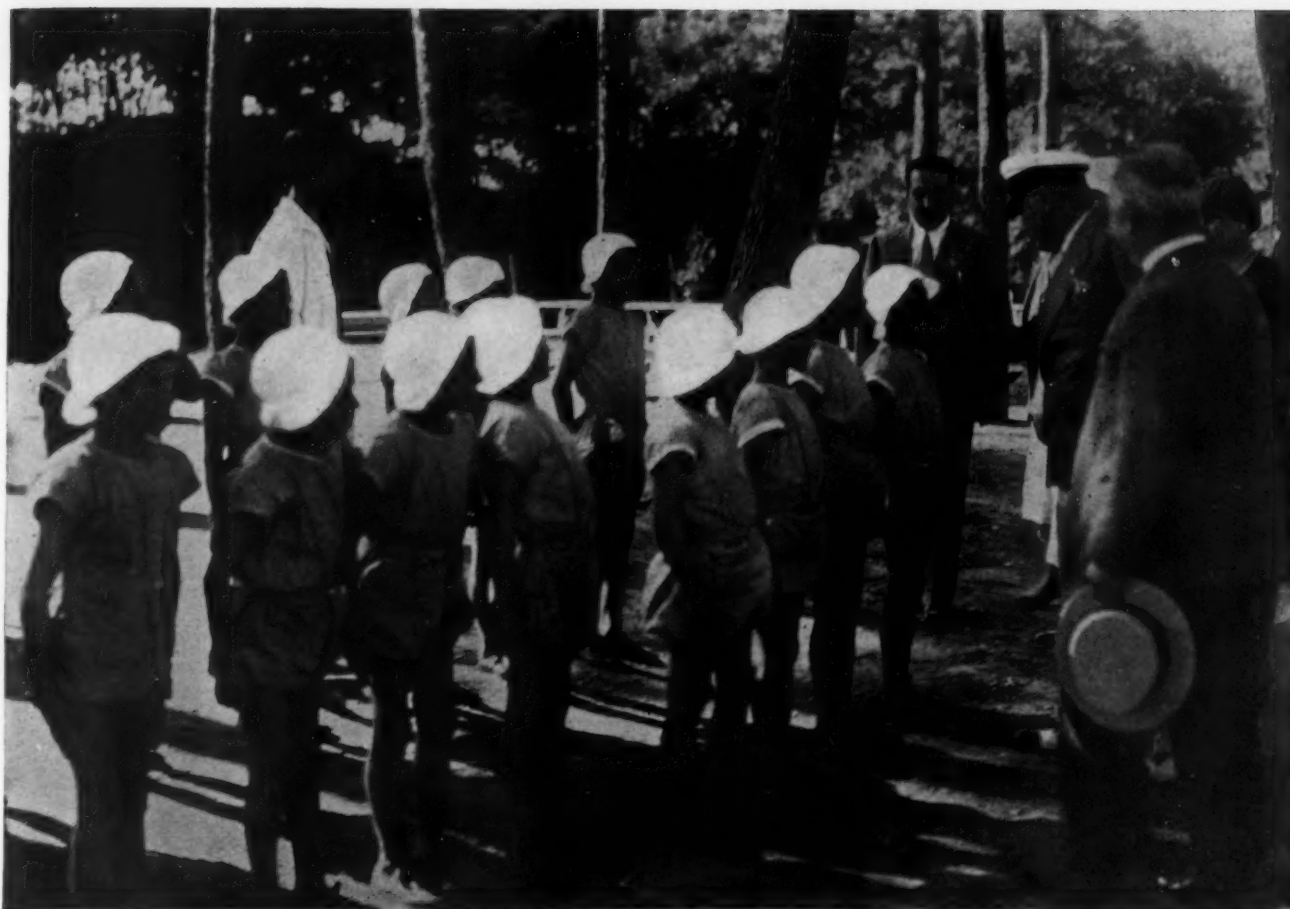
Italian Schools Under Fascism

By PHILIP W. L. COX

IN AMERICA, we have a long tradition of social action which involves the taking of sides. Political parties, religious sects, philosophic and economic "schools" tend to debate and to persuade rather than to seek for the truth. Emotionalized loyalty to a conviction or a prejudice is even esteemed a virtue. Indeed "scientists" in the social fields have not been free from this human frailty.

It has been somewhat inevitable, therefore, that fascism has been challenged as an enemy of our democratic institutions and ideals without our knowing much about its nature or its fundamental purposes. Liberals and socialists have joined to

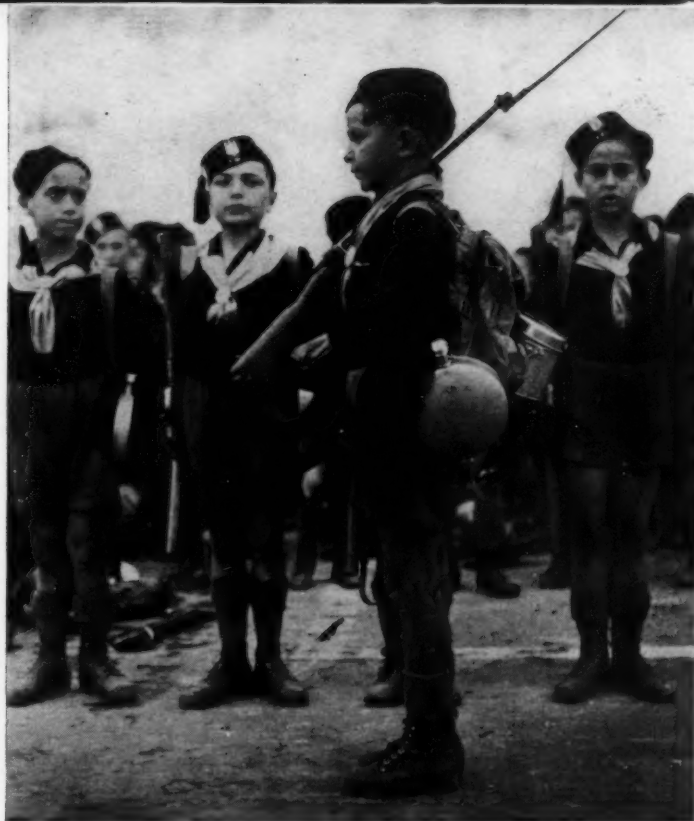




denounce it; politicians have accused each other of aspiring to fascist dictatorships; state laws have been passed with the support of anti-fascists to limit personal freedom after the best fascist manner! In the public school world, we have denounced the high-handed activities of the Chicago bankers and applied to them the term "fascistic." Some speakers have even seen the hand of fascism directing the propaganda for federal subsidies for community schools.

What would happen to American schools if our national or state economies were actually directed by fascistic groups? Only partial answers can be formed by examining what has happened in those European countries that now are under fascist parties and dictatorships, but such partial answers are worth seeking. A search for such help as they might offer led me to spend a considerable part of the academic year 1933-34 in Italy, Jugoslavia, Austria and Germany.

The coups d'état of the latter three states were all too recent for much conclusive evidence to be available. In Italy, however, more than a decade had elapsed since the



Il Duce and the children (above). The Balilla is composed of boy fascists from eight to fourteen years of age. Boys of this age may also join the Avanguardisti, and at eighteen they become Young Fascists.

famous March on Rome of 1922. Consequently, the conditions in the schools were such as to indicate the policies and programs of the Italian Fascismo now that it is apparently firmly established. Hence, this article deals only with the Italian fascists and their schools.

There is much diversity of opinion among the well informed Italians, both fascists and non-fascists, regarding the nature and history of the movement. To some it is "pure act" bereft of other philosophy than empiricism and opportunism; indeed, it despises philosophy because it seems inactive. To others, equally well informed and capable of judging, it is a program definitely based upon a consistent idealistic philosophy in opposition to the evolutionary pragmatism that underlies liberalism, laissez faire and democracy. All would agree, however, that it is vigorous, positive, nationalistic, propagandistic, intolerant and coercive. It has a program, though a variable one. It purposes that Italians shall support that program, or failing that, shall not actively oppose it.

The justification of fascism by fascists is that social welfare is best assured by the control of a vigorous and competent elite which accepts seri-

ously its responsibility to compel the people, by education and persuasion, if possible, but by force if need be, to accept whatever measures are necessary for their own good. Such elites, they say, have always characterized all well governed communities throughout the world.

Unfortunately, so runs the argument, these elites grow old and feeble; they retire from active control and soon cease to be effective. When that happens, vigorous new bodies must arise, seize power, assert themselves and establish new elites.

In the case of Italy this new elite is no blood-thirsty ogre. It is a serious, dramatic, disciplined and vigorous body of men. Their assumptions and program I have summed up elsewhere as follows:

We are the elite. We are the elite not because we are better, abler, or wealthier or more nobly born. We are the elite because we *will* to create a unified Italy, a purified Italy, an economically self-sufficient Italy, an Italy that shall stand proud and unafraid in this world dominated by powerful states, an Italy in which every man is secure in his property, in his reasonable expectations of economic return and enjoyment of life, and in his protection against sickness, old age and poverty, an Italy of health, of disseminated culture and of vigorous race.

We, the elite, *will* these things to become. We can only break through the stupid selfishness and inertia of our age



This school building for 1,200 pupils was constructed by the Institute in the Luigi Luzzatti zone, Naples.

by positive action. We seize leadership which involves work, restraints, puritanic lives, rigid honesty, great self-sacrifice. To this elite we admit only those who accept such discipline and who recognize that efficient organization implies hierarchy.

All Fascists will, therefore, give themselves wholeheartedly to carrying out the directions and requests that come to them from the officers of the hierarchy, and in order to personify this appeal and this hierarchy they will again and again pledge their fealty and implicit obedience to their leader, Il Duce, Benito Mussolini.¹

The young men who returned from the war in 1918 to find their jobs gone and the opportunities for bourgeois enterprise limited and who formed the backbone of the *facii* which developed throughout Italy are now middle-aged. From the beginning it was apparent to their leaders that the fascist revolution could not be long-lived unless they could educate the youth to appreciate the new regimen and develop leaders to support it.

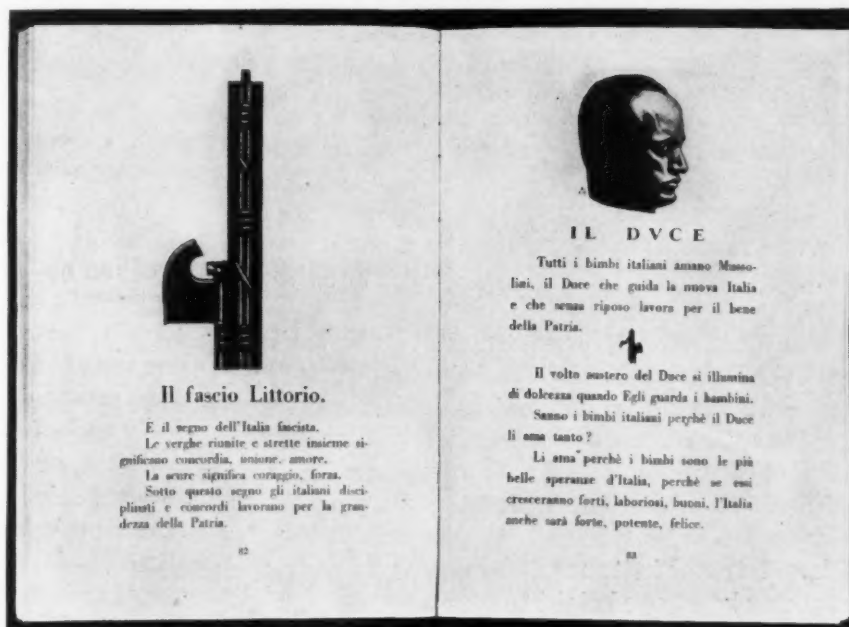
Two major instrumentalities for achieving such outcomes were at hand — the schools and the youth organizations. The former had been democratized only in the sense that local communities which desired and would support good schools had them, that the curriculum of the state secondary schools had been broadened and that government supervision was limited to regulations. The latter consisted of Catholic Church organizations and socialist youth groups, and, almost immediately after the development of *facii*, of young fascists or *Balilla*.

The fascist government acted promptly to modify the schools. Giovanni Gentile, a philosopher and educational theorist of recognized standing and of positive vigorous personality, was appointed minister of education and authorized to carry through the thorough-going *Reforma Gentile* of 1923.

Straightway the formalism of the elementary school was swept away; for a time even textbooks were banned. Art, music, literature, gardening, handicraft and creative writing dominated the curriculum. Arithmetic, handwriting and reading were individualized in harmony with the methods used for the expressional subjects. Teacher-training and the inservice growth of teachers were recast; in the former intellectual selection and practical experience were stressed; in the latter, vaca-

tion courses in progressive practices and in hygiene and sanitation and fascist politics were offered at government expense. Conditions in rural schools were greatly improved, new buildings with ample grounds were erected, teachers' salaries were increased, more adequate supervision was secured. Intellectual selection of pupils was subordinated to universal expression and success.

In the secondary schools, on the other hand, intellectual selection was made rigorous; the curriculum was made narrower but meaningful, and each type of school was given a specific function. The gymnasium-lyceum and the scientific profes-



Indoctrination begins in the primer, an artistic example of which is shown.

sional schools were designated as preparatory schools — the former for the university with ancient and modern languages, history and philosophy, mathematics and science, and art history; the latter, stressing mathematics and science, for the engineering schools affiliated with but not counted as part of the university. Particularly in the lower cycles of these preparatory schools, the elimination of the less able and the less serious pupils is severe, and the maturity examinations for admittance to the higher institutions require a quality of mind and integration of knowledge far beyond those which most American college men ever attain.

The final secondary schools — the three-year complementary school and the eight-year technical school for commercial training, the normal institute for preparing elementary school teachers, and the three-year lyceum "finishing schools" for girls — are less intellectually rigid though they are exacting in their vocational demands.

¹"Fascismo and Education," The Kadelpian Review (Vol. XIV, No. 4), May, 1935.



The attractive cover of the primer shown on page 15.

The spirit of the elementary schools is exuberant; that of the secondary schools, friendly though placid and decorous. The former is frankly and obviously propagandistic for patriotism, Catholicism and fascism; the latter is rationalistic, a social philosophy to be understood by the intellectual elite.

The fascist party was not altogether satisfied with the *Reforma Gentile*. It desired more vigorous and enthusiastic indoctrination and moral training than the reform seemed to stress. Since it was obliged to support the school program of its own minister of education, it directed the party energies to the expansion and invigoration of the Balilla. The name in its narrower sense was restricted to young boys, aged eight to fourteen. Other boys, ages fourteen to eighteen, might join the *Avanguardisti*, and those from eighteen to twenty-one, the young fascists. The girls, too, were organized into the *Piccole Italiane* and the *Giovani Italiane*. All of these organizations were combined into the *Opera Nazionale Balilla* and, after the retirement of Gentile, were placed by the government under an assistant commissioner of education.

The physical education program of the elementary schools, noon-day luncheons, the *assistenza*, and some aspects of school discipline were cared for by the Balilla; the after-school and vacation activities including military drill, sports, health inspection and treatment, excursions, and many forms of cultural work became Balilla projects. Eighty-six per cent of the elementary teachers became fascist party members (or women auxiliaries) and Balilla officers; in villages, the school director is, ex officio, president of the local Balilla. By these steps the Balilla is absorbing the elementary schools. Indeed, the rural schools of Calabria and Sardinia are administered by the Balilla.

Finally, the phrase *pedagogia fascista* came to overshadow *Reforma Gentile*. By the former is

meant the enthusiastic, participatory activity, the dramatic singing, saluting, marching, reciting, indoctrination, the cooperative projects, the care of school premises, the volunteer help, the inspection of houses and neighborhoods, and among the oldest youths, the espionage on their fellows and their teachers.

On Jan. 1, 1934, the Italian government nationalized all public schools, partly as a measure of economy and efficiency, but largely to replace all local initiative and independence by a program directed from and supported by the central government and the fascist party. It is assumed by those Italian school administrators who seem most closely associated with this development that the elementary education program and the Balilla program are to be definitely merged. Not only the *Casa Balilla* and the school buildings but the play field, museums, drill grounds and the community-at-large will be both school and Balilla provinces.

Thus the community elementary school with community teachers of youth replaces both school teaching and Balilla enterprises as such. Children continue to learn to read and write and compute in schoolrooms; they study geography and history and nature as before; they draw and sing and prepare compositions and recite poems as spontaneously and effectively as ever. But all of these school activities are coordinated and integrated with the rest of their lives to a degree that no other country save Russia has yet achieved at elementary school level. And, consciously enough, there is some tendency for Russia to move temporarily at least in the opposite direction.¹

Possible Applications for America

Whether or not such an integration is desirable and whether or not a fascist elite in America would direct American elementary education toward such an outcome are not here discussed. If the experience of Italy would throw any light on the probable developments in American elementary education, if America should "go fascist," this much could be prophesied: activity programs and artistic self-expression would receive great impetus; the physical and cultural achievements of children would receive careful attention; every avenue of release would be opened so that energy and thought would be expended on how most effectively to act rather than on what acts ought to be undertaken.

Not until university level would independent thinking be sanctioned — and then, says Benedetto Croce, of Italian students, "it is almost too late." That word "almost" may be full of importance for later developments in any fascist country.

¹Cox, Philip W. L., *The Conservative Trend in Russian Education*, *The Kadelpian Review* (Vol. XIV, No. 2), January, 1935, pp. 121-129.

When Teachers Help Administer

By L. R. JOHNSTON

SECONDARY education stands at the crossroads. Commendable as its progress has been, revolutionary changes must take place. One of these is in respect to teacher participation in administration.

While there are many exceptions, our secondary schools have been places where teachers are employed to teach the subject-matter of their respective fields. Policies of administration have been handed down by the principal. Teachers receive assignments of various kinds and are expected to carry them out. Suggestions are frowned upon. Initiative and resourcefulness are dampened through lack of encouragement or of approval of things well done. One or two minds do most of the thinking. Teachers come and go without knowing one another.

The processes of teaching in these schools are such as one might expect them to be if education were something to be bottled, labeled and certified to. Pupils pass courses more often than not with the "get by" attitude, compete for marks and sundry honors and then move out into the larger world, supposedly fit to function in the society of 1935.

Few schools have any real unity. Jealousies between teachers abound, cliques exist, fault finding persists, the principal in too many cases is viewed as an autocrat, a few teachers are allowed to dominate, and this is labeled as an environment where boys and girls may acquire those habits and traits of character needed for constructive citizenship.

The essence of an educational institution can never be the building and the equipment. It must forever be the quality of its teaching staff and the educational processes that it evolves. Much in education is caught, not taught. This has been said so often as to be almost trite.

A school cannot be measured merely in terms of what percentage of its graduates succeed in college. In fact, its greatest values cannot be meas-

Teachers cannot take over the work of the principal, but this does not signify that they cannot share in all the policy making and in the general conduct of the school. A faculty under a principal should exemplify the kind of learning and working together that should characterize all pupil activities

ured except by observing the quality of citizenship exemplified by its graduates as more and more of them take their places in society beyond the school.

It is not reasonable to suppose that the best values can be obtained in an atmosphere that thwarts teacher growth, generates anti-social qualities within the staff, and prevents members of the faculty from setting the example for the youth about them.

The most desirable out-

comes in education never flow up from pupils to the faculty but just the reverse. It is unthinkable to imagine that effective citizenship can be promoted by a staff that does not practice the highest qualities of citizenship in the daily operation of the school.

The real school is never seen by the visitor. It is felt. It is a composite of the qualities of mind and heart of every member of the staff from the principal down and of every member of the student body. Education is always a matter of growth within the individual. Growth signifies change.

All that any teacher or faculty can hope to do is to provide stimuli under control conditions, and this, in the last analysis, means guidance. The pupil must do the rest. A growing, happy faculty is the most significant aspect of the stimuli provided — not lessons assigned, home work done, or examinations passed. It is life in contact with life. It is because the teacher's personality, attitudes of mind, happiness, initiative and relationships with other members of the staff play such a prominent rôle in the permanent changes that take place in boys and girls that teacher participation in administration is significant. Would anyone argue that the teachers previously mentioned can do their best work under the conditions described?

There is a school in which the situation is quite different from those mentioned. A teacher in this school recently remarked, "There's something about our school that just 'gets into you.'" I happen to know how that something was evolved. It

took time, of course. Teacher participation in administration began several years ago and has since been so heartily supported that the faculty and pupils are carrying on in an admirable manner in spite of the drastic reduction in teachers' salaries, the increase in teacher load, and a reduction in janitorial service which has been so drastic that it is necessary for pupils to do most of the cleaning of the building.

If a school does not have that something about it that makes one love the place, that stimulates one to fight and sacrifice for it, that causes one to strive to excel, it cannot build into boys and girls the best type of citizenship.

It is obvious to the most informed that many radical changes must eventually take place in the whole realm of teacher training. Whatever these may be and however effective they are in sending out better trained teachers, a large part of the teacher's growth must take place in the field. The high school principal, so far as secondary school teachers are concerned, holds a strategic position in promoting teacher growth and in determining the teacher's greatest usefulness.

There is no formula for teacher participation in administration. It is an attitude of mind — the spirit in which things are done. The principal from the beginning and at all times should be approachable, interested in the welfare and success of his teachers and always open to suggestion. He should be one "with" rather than one "over." This cannot be accomplished merely by making declarations to that effect. It will be attained by acting consistently in that spirit.

Opportunity for Growth Is Needed

There is no way of evading the fact that any institution is the lengthened shadow of its head. The high school principal is held responsible for his school and he is its leader. But leadership does not mean merely ordaining this or that, except possibly under exceptional circumstances. In a democracy it means attaining ends through co-operative effort.

Teachers cannot take over the work of the principal, but this does not signify that they cannot share in all policy making and in the general conduct of the school. A faculty under the leadership of the principal should exemplify the kind of learning and working together that should characterize all pupil activities inside or outside the classroom.

We not only understand but approve that which we have had a part in evolving. Teachers are no different from their pupils as far as the basis for continuous learning is concerned. A principal can sit down at his desk and work out fairly satisfac-

tory solutions to the problems that arise, but in so doing he robs his faculty of one of its greatest opportunities for growth and fails to stimulate that teamplay which characterizes any great institution — certainly an educational institution. The school at any given moment should be the sum total of the thinking of the entire staff.

I know from experience the thrills that come when a teacher creates something or offers a suggestion which I, as principal, would never have thought of. Teachers who work in an atmosphere of freedom, who have a part in establishing policies, who are encouraged to maintain a critical attitude to all that has been established, who receive commendation for their achievements or suggestions, who see in the principal a friend, guide and philosopher will function on a plane frequently beyond their own most sanguine expectations.

Happy Faculty Inspires School

In such an atmosphere teachers are happy. They are helping an associate with some assignment or project, are interested in the welfare and success of all other members, are alive. They find satisfaction because in varying degrees the four fundamental cravings of the human heart — for security, for recognition, for new experience, and for adventure — are cared for in varying degrees.

What a glorious opportunity it is for boys and girls of the adolescent age to be associated with such a faculty! This spirit will flow into all the activities within and outside the classroom. The final result is a school in which teachers and pupils adventure together in a varied program of activities, the teachers acting as guides, friends and philosophers. In such a school there is life abundant under controlled conditions where changes in boys and girls are taking place which do not lend themselves to a formal testing program but which will build a citizenship that can rise above selfish interest and act for the common good.

Teacher Help at Term Opening

The initial organization for each succeeding year should be worked out by the principal and his office assistants to the point where the entire staff can assist in its completion for one or two days before the opening of school. Under the direction of the principal, teachers can complete the schedules for individual pupils from master schedules already worked out, determine the number of textbooks needed and make out requisitions for these so that they may be placed in the respective rooms to be issued on the opening day, go over the instructions for the first day of school and make suggestions for their improvement. There are

many other items that might be mentioned here.

It is obvious, of course, that the suggestions offered will vary greatly from school to school, but such a plan enables each member of the staff to have a part in the final organization for the new year. This promotes team-play, ensures a well organized school from the beginning, and guarantees a greater degree of success on the part of the members of the faculty in that, through active participation, they are well informed about details and feel a sense of security from the start.

Faculty Meeting Schedule Should Not Be Set

From this point on, under the leadership of the principal, the entire staff should decide on policies, rules and regulations. This means faculty meetings. Much has been written upon this time-honored subject. I do not believe in a set schedule of faculty meetings after school. They should be held when they are needed. Some felt need should exist. At times the entire faculty will be concerned; at other times, only this or that department or special group. The function of these meetings should be to solve problems as they arise or to advance the educational processes of the school. It does not matter who presides so long as the meetings have a real purpose and a need shared by most of the staff.

Faculty meetings should be an integral part of an evolving institution which never arrives but is forever adjusting itself to meet new demands and to discard procedures no longer consistent with the facts. Many schools have faculty meetings merely for the sake of professional growth, as if to say, "Now we shall have professional growth." This is not to say that such meetings are not helpful and may meet a need at one stage of a growing faculty, but, by and large, over a period of years the best professional growth is not attained that way. Faculty meetings should become necessary because crises arise or obstacles get in the way of an emerging institution.

Daily Morning Meeting Is Good Plan

Under such a scheme it is a good policy to announce the meetings a day or so in advance in order that all concerned may be thinking about the problems to be taken up and so that previous appointments or plans on the part of the members of the staff may not be interfered with.

The daily morning faculty meeting is a valuable administrative device. I have used it in two schools and the teachers in both places considered it invaluable. It takes place for ten minutes before the opening of school. Hundreds of items are handled during the year at these meetings. As each day begins every member of the staff understands what

is to happen and when and how. All written announcements are cleared up and their significance brought out. Last minute announcements can be added. Quick decisions on many items can be made, short conferences with groups of teachers held, commendation for some good piece of work may be made when it will do the most good, words of encouragement expressed, some excellent article or book spoken about, and a little humor now and then mixed in to start the day aright. Such a plan keeps the faculty as a working unit, develops oneness of spirit and affords faculty participation in administration from day to day.

By acting on committees in evolving a program of studies, in adjusting a program to meet changing conditions, in selecting textbooks and materials or in working out an assembly schedule, teachers are afforded excellent opportunities for a sharing in the administration of the school.

In the matter of assignments as, for example, club or class sponsorship, there must be due regard for a teacher's fitness and desires. Whenever possible, teachers should be consulted before definite assignments are made. This respects personality, and the principal will always secure many helpful suggestions concerning interests of teachers. The objective should be to have each individual working with the activity that he likes or is best fitted to carry forward.

Should Seek Teacher Suggestions for New Year

Toward the close of each year teachers should be encouraged to hand in written suggestions for the improvement of the school the following year. Teachers should feel free to make suggestions pertaining to any aspect of the school, even to the principal himself. Unless a principal is big enough to welcome a criticism about himself and to commend the associate who offers it, he still has heights to scale.

It is amazing how the suggestions of an entire staff can in various and subtle ways evolve an institution to the point where work and play merge into one and the same activity, and pupils are on the march to a more abundant life and a more constructive citizenship, because all are learning from one another, sharing in the solution of problems arising out of a dynamic school environment, and adventuring together in the exploration of many enchanting fields.

As one teacher expressed it, "Thus through co-operation and proper recognition, school teaching can be made an exhilarating adventure where the teacher's as well as the pupil's personality has a chance to grow — to be itself. A happy interested faculty makes for a wholesome environment in which the pupil becomes the chief beneficiary."

What Shall We Teach of The Effects of Alcohol

By J. B. BUCKLER

*A New Basis of Attack
on a Familiar Problem*

FRANK discussion of what is the proper attitude for the school to take in regard to instructing boys and girls in the use of alcoholic liquors is needed. We are now able to ask without fear or trembling the question, "What is the effect of feeding alcohol to the human being?" the same as we may ask, "What is the effect of feeding cod liver oil to baby chicks or cottonseed meal to swine?" We should likewise be able to secure just as sane an answer.

If it is possible for a federal or state department of agriculture or a state supported university to carry on scientific investigation relative to the problems of proper feeding of chickens or swine and the different effects that continued use of various foods may have upon the animal studied, certainly it is equally possible for state and federal departments of public welfare or the research laboratories of our universities to carry on like studies upon the problem of the effect of feeding alcohol to the human being. The importance of the latter problem can at least be classed as equal to the former. If we can have the conclusions of reliable authority for the one, we can certainly secure it for the other.

If certain people today are saying, "Young people should learn how much liquor they can safely carry," or "Two per cent (or 4 per cent or 6 per cent) will do no harm to the body if taken in small (or large) amounts," or "The food value of one glass of this-or-that brew is equal to so much bread or meat," the physiologist, the dietitian, the research worker on biologic problems should come forward with the correct findings. As teachers of youth today, with health and physical education as one of the chief objectives of our teaching, we should demand that the truth be found. We should insist that it be incorporated in science books for purposes of instruction in public schools, and that political, religious or other organized propaganda either pro or con be confined to scientific findings.

From where will these scientific facts come? Who will investigate the problems involved in feed-

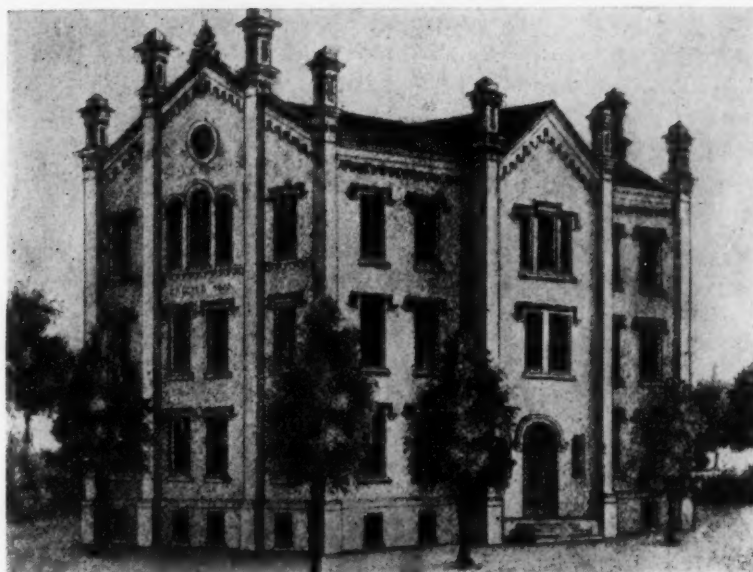
ing alcohol to boys and girls as well as to adults and give their findings the stamp of undisputed authority? Since our federal government has permitted both complete freedom in use of alcoholic liquors and complete prohibition of their use, with unsatisfactory results in each case, and since the changes in either direction have been made in the name of temperate America, let us memorialize our federal government to set the problem before our federal department of education that it may give the teachers of American boys and girls the truth regarding feeding the human body on alcoholic liquors.

Let us challenge the sincerity of men and women who repeatedly state that they desire a temperate America, that they seek the welfare of our youth, that a more healthful generation for tomorrow is their goal, and at the same time attempt to confuse the minds of boys and girls with false statements, with emotional appeals, with political propaganda or with apathetic inertia. May we not rightfully ask as teachers that clear statements of scientific facts and conclusions be placed in our hands, and that these statements have the approval of the best scientific authority as well as the approval of our government!

Teachers may rightfully expect a clear statement of scientific facts in regard to the effects of alcoholic liquors on the human body. They are not content further to confuse the minds of boys and girls with false statements, emotional appeals and political propaganda. Nor should they display inertia on such an important topic

Central High School, Chicago's first public high school and the first coeducational public high school in America, opened its doors in 1856.

By DON C. ROGERS



Growth of the American High School

ONE of America's contributions to civilization is the public high school, free to the children of all people. In the early years of its history, the high school was not patronized to any marked extent, but in recent years the children's response to their opportunity for secondary education has been truly astonishing. Chicago data are illustrative of this trend.

In the fall of 1856, Central High School, the first public high school in Chicago and the first coeducational public high school in America, opened its doors to 114 adolescent boys and girls. The high school grew no faster than the elementary school, and for several years the ratio of enrollment remained at about four pupils in high school for every 100 pupils in elementary school. In fact, during the next thirty-nine years there was no increase. In 1895—the half-way mark between 1856 and the present—the total number of pupils in high school had increased to 6,600, but the ratio to elementary school enrollment was the same; that is, for every 100 pupils in elementary school in 1895, there were still only four in high school.

During the second half of their existence, Chicago's high schools had a tremendous increase in enrollment. In 1934, for every 100 pupils in elementary school there were forty enrolled in high school. In the first thirty-nine years there was no increase in percentage of high school enrollment; in the second, enrollment increased 900 per cent.

This remarkable recent growth may be attributed primarily to five causes: (1) There was an improvement in the economic status of the average

family sufficient to release its adolescent members from labor to engage in study. (2) The period of compulsory school attendance, recently extended to include sixteen-year-old children, is enforced with penalties. There was a compulsory attendance law in 1895 but there was no penalty for its violation. (3) There are more children of high school age because the city population increased 141 per cent between 1895 and 1934. (4) Even before the depression, technological unemployment of child labor was increasing; there were 75 per cent fewer children in industry in 1930 than in 1900. (5) The enriched modern curriculum has lured large numbers of young people into high school and has held them there.

In 1856, there was a total of forty-eight courses from which a pupil might make a selection, and fifteen of the forty-eight were Greek and Latin courses. A few new courses were introduced from time to time, but for many years there was need for only a limited number of academic courses because the curriculum was largely classical and intended almost solely to train pupils for admission to college. In 1895, there were fifty-seven academic courses, and 70 per cent of the pupils were studying Latin. There was no technical or shop work offered except in one small three-year high school giving twelve technical courses.

Contrast that picture with the present one: Today only 12 per cent of the pupils study Latin. Not one of Chicago's 128,000 high school pupils is studying Greek. On the other hand, there are 22,000 pupils enrolled exclusively in the four

technical high schools, and the other thirty-three high schools also offer some technical courses. It is estimated that 60,000 pupils are taking one or more shop courses or commercial courses.

In 1934 there were 248 high school courses offered in Chicago, 200 more than in 1856. It is interesting to see how the increase in courses, but more especially the changed emphasis in the type of courses, had been reflected in school building construction. Central High School had a sum total of twelve rooms, all regular classrooms. One of Chicago's most recently completed high school buildings, Lane Technical High School, has fifty-three regular classrooms and the following special rooms: eight general science laboratories, four physics laboratories, four chemistry laboratories,

qualifications for high school teachers than for elementary school teachers. Consequently, high school teachers command a higher salary (40 per cent higher in Chicago), which is reflected in increased operating costs.

The average elementary school textbook costs about 64c; the average high school textbook costs about \$1. The average elementary school library book costs about 75c; the average high school library book costs about \$2.20.

The high school curriculum requires buildings equipped with shops, laboratories and other special rooms not required in elementary school buildings. The cost of constructing a high school building is 100 per cent higher per pupil than that of an elementary school building. The cost of maintaining



Lane Technical High School, Chicago's most recently constructed high school building, opened in 1934.

three biology laboratories, special lecture rooms, eight art rooms, sixteen mechanical drawing rooms, four architectural drawing rooms, a typewriting room, a band room, an orchestra room, two foundries, two forge shops, three auto shops, seven machine shops, ten electric shops, an auto ignition shop, a metal pattern shop, a welding shop, an aviation shop, a general metal shop, a heat treating shop, a linotype room, a composing room, a press room, three apprentice carpenter shops, two apprentice sheet metal shops, two apprentice plumbing shops, a baker's shop, an air-conditioning laboratory, four gymnasiums, a natatorium, locker and shower rooms, a library, two study halls, a civics room, a lecture hall, an R. O. T. C. suite and rifle range, a lunchroom (seating 1,200), an auditorium (seating 2,100) and an administrative suite (six rooms).

A serious problem connected with the phenomenal recent increase in high school enrollment is the cost. Accrediting agencies usually set up higher

a pupil in high school a year is \$125; in elementary school, \$62 (1933 data).

Thus, it is not just a growth in public school enrollment, but the fact that this growth has taken place overwhelmingly in the high school grades that has caused the increase in the expense of operating and maintaining the public schools of America.

On the other hand, this increase in high school attendance is returning tremendous social and cultural dividends not only to the individuals trained but to the community, the state and the nation. Such dividends are not measured by dollars and cents. They mean better manhood and womanhood; more sturdy health and physical vigor; more stable government, less crime; a keener and more pleasurable appreciation of art, music, literature and other cultural activities; a higher plane of home and family life; a more worthy use of leisure time. These are public benefits — and they are fundamental!

School Finance Legislation of 1935

By M. M. CHAMBERS

THE inescapable necessity of state assumption of a larger proportion of the cost of maintaining local schools is reflected in much of the current new legislation. A general appropriation of state funds to every school district in the state, in proportion to its pupil population, plus a further appropriation to an equalization fund from which allotments will be made to enable weak districts to reach a fixed minimum standard of school support, seems to constitute a popular basis for a program of state aid.

In some states the general statewide aid is earmarked for teachers' salaries, and often there is provision for separate and special state assistance for transportation of pupils and the tuition of non-residents. The responsibility for administering the increasing distribution of state funds should be, and usually is, entrusted to the state department of education. Unavoidably this responsibility carries with it new opportunities for the effective exercise of wise state supervision, and enables the chief state school office to improve the scope and quality of its service to the whole state. This is undoubtedly a salutary tendency.

Ohio's New Foundation Program

This year Ohio enacted a plan under which the state will pay about \$48,000,000 of the \$85,000,000 total annual cost of the public elementary and secondary schools. It is estimated that from \$35,000,000 to \$40,000,000 of the sum to which the state has committed itself will be produced by existing taxes, including the sales tax, the liquid fuel tax, the cigarette tax, and a portion of the tax on intangible property. Probably at least \$10,000,000 additional will have to be raised by new taxes—a job for which a special session of the legislature in the autumn would be appropriate.

Of the total state aid, \$40,000,000 is destined for the "flat distribution" fund, \$3,500,000 for the equalization fund and \$2,500,000 for transportation aid. The flat distribution will be at the rate of \$0.085 per day for each kindergarten pupil above five years of age, \$0.17 per day for each elementary pupil, and \$0.255 per day for each high school pupil. The respective amounts per year will be about \$30 for each elementary pupil, and about \$45 for each high school pupil. Each district is required to levy a minimum of 3 mills, and if this,

plus the flat distribution of state aid, does not reach the minimum standard of the "foundation program," the state will pay the difference out of the equalization fund.

The minimum standard for all schools having 180 pupils or more is \$0.125 for each kindergarten pupil, \$0.25 for each elementary pupil (about \$45 per year), and \$0.375 for each high school pupil (about \$67.50 per year). Elementary schools and high schools are treated as separate units, even when housed in the same building. For schools having fewer than 180 pupils, the minimum standards are as follows: One-teacher schools, \$1,150 per year, plus transportation and tuition costs; two-teacher schools, \$2,400; all other schools of this class, an increased per pupil allowance according to a schedule to be formulated by the director of education.

Nearly all of the equalization aid and the transportation aid will go to rural and village districts, for all large city districts will reach the minimum standard by means of the local levy plus the flat distribution of aid.

The law gives the director of education large powers virtually to compel the consolidation of small and inefficient school units, by withholding aid from them when in his judgment they cannot be operated efficiently or economically. The present director has indicated, however, that the policy will be to proceed cautiously and with careful regard for local rights and interests, and effect consolidation by persuasion rather than compulsion. It is expected that this process will extend over a considerable period of time, moving slowly but always toward a better organization in keeping with the needs of the times.

Oklahoma's Plan

Oklahoma has enacted a measure providing \$8,200,000 annually as state aid for local schools, to be distributed in two ways. The state will pay what is designated as "primary aid" for the purpose of enabling every district to pay a schedule of minimum salaries for teachers, ranging from \$50 per month for those holding the lowest grade of certificate, to \$90 per month for those holding certificates based on a bachelor's degree and \$100 per month for those having a master's degree or any higher standard of training. These minimum

figures may be raised by the state board of education. "Secondary aid" will be reserved for districts wherein a 10-mill levy plus the "primary aid" will not maintain "the minimum school for the minimum term" according to standards previously fixed. No district will receive this aid until it applies for it and shows that it qualifies under the law.

The state board of education is authorized to withhold either or both types of state aid from schools having an average daily attendance of fewer than eighteen pupils, and from schools which fail or refuse to meet minimum standards in other respects. Undoubtedly this power will be used to some extent to hasten the consolidation of small schools and the provision of better facilities for the children of remote rural regions.

Changes in Minnesota

Minnesota has appropriated for special state aid \$6,520,000 for 1935 and \$6,530,000 for 1936. The total of \$13,050,000 represents an increase of \$1,500,000 over the appropriations for this purpose for the preceding biennium. A law has also been enacted to favor agricultural lands in independent school districts and in unorganized territory by a differential rate of taxation. This provides that if a county has fewer than twenty school districts, the tax rate on agricultural lands in the specified types of districts shall not be more than one-half of the rate on nonagricultural land in the same district. The revenue lost is to be made up by supplemental state aid, and it is provided that if the state aid is not paid in full, the deficiency may be made up by a uniform levy on all property in the district. Thus the support of the schools is properly ranked as superior to the relief of agricultural landowners.

The minimum standard of school maintenance has been raised from \$40 per pupil to \$60 per elementary pupil and \$100 per high school pupil. If a 30-mill local levy plus all other state aid, except transportation aid, does not aggregate this minimum, supplemental state aid may be claimed to supply the difference. Furthermore, if this does not produce \$1,000 per classroom unit, the state board of education is authorized to grant further aid to reach that aggregate. Aid for transportation may reach as high as \$36 per pupil transported or boarded, and the former limit of \$4,000 to any one consolidated school has been repealed. Non-resident tuition aid is \$7 per month per nonresident pupil.

In Minnesota unpaid school taxes on lands foreclosed under the Rural Credits Law will be made up to the school district out of state funds. A constitutional amendment has been proposed, to be

voted upon by the people in 1936, which would exempt all real and personal property from taxation for state purposes, and materially reduce the possible maximum of local revenues from the property tax. This, if adopted, presages further state assumption of local school support.

Indiana's justly famous act of 1933, which made it permissive for the state to pay to local school districts a sum not to exceed \$600 per teacher, has been improved by amendment. During the two years of its operation the actual amount of state aid per teacher was about \$404 per year. As amended, it makes a transfer of at least \$400 per teacher mandatory, and there is no upper limit. It is expected that it will reach \$800. This law has been further strengthened by defining teachers as those "who are employed under contract, as regular, full-time teachers, and who are employed in compliance with the teachers' minimum wage law." This is to prevent some local boards from circumventing the spirit of the law by drawing the regular amount of aid per teacher while employing some of their regular teachers on a substitute basis at subminimum salaries.

North Dakota established an equalization fund in 1933, but no money was provided for it until this year, when \$1,000,000 was transferred from the State Hail Insurance Fund, and a sales tax was enacted, from which source the equalization fund is to receive \$700,000 the first year and \$1,950,000 the second year.

What Montana Provides

Montana has set up a state public school general fund, at present fed by varying percentages of the proceeds of nine types of taxes, including inheritance, income, store license, corporation license, metal mines, oil production, electrical energy, freight lines and telegraphs. The percentages vary from 5 to 50 per cent, except for the freight line tax, all of which tax goes to schools. After March 1, 1937, all the smaller percentages will be raised to 50 per cent except the corporation license tax, of which the school fund will continue to get 25 per cent. It is estimated that at present these sources will produce about \$725,000 per year; but for the next two years \$150,000 of this is to go to the common school equalization fund for needy schools, and \$215,000 per year is to be diverted to relief and water conservation, leaving an estimated \$360,000 per year for flat distribution, which amounts to about \$70 per teaching unit.

For fourteen years Utah has had a law providing for a flat distribution of state aid at the rate of \$25 per pupil. Recently this sum has not been paid in full on account of tax delinquencies. This year an effort was made to remedy this deficiency by

providing that all proceeds of the sales tax in excess of \$2,060,000 shall go into the school fund. There is also an equalization fund, to reach the equivalent of \$5 per census child by 1936-37. It is hoped that the proceeds of the sales tax will enable the state to pay both basic aid and equalization aid at the full rate provided for in the statutes.

Nevada has a distributive school fund fed by a statewide property tax of \$0.11 per \$100 valuation, a portion of the corporation filing fees, the income from the permanent school fund, and interest on school land contracts. All these sources have decreased in productivity, so that the income for 1934 was \$125,000 less than for 1929. This has made it impossible to distribute state aid on the basis provided for by statute (\$275 per teacher plus \$16 to \$18 per pupil). The legislature of 1935 appropriated \$100,000 of the proceeds to be realized from newly enacted liquor taxes to the distributive school fund, which may enable resumption of state aid payments on the approximate level provided for by the existing law.

In many of the Western states having permanent school funds largely invested in land, there has been a recent tendency toward heavy losses by reason of foreclosure sales. Generally steps are being taken to restore these losses. For example, Colorado has enacted a law providing that at the end of the biennial fiscal period a tax levy

sufficient to make up such losses shall be included in the next levy for state purposes. If the foreclosure sales in any such fiscal period produce gains for the fund, the gains must be carried forward to the next succeeding period as a credit against any subsequent losses.

In Montana the permanent school fund is in a parlous state, having lost about \$4,250,000 by farm mortgage losses, in addition to a diversion of \$3,000,000 acknowledged by the legislature ten years ago. Complete restoration of these losses would require a 2-mill levy on all property in the state. When complete restoration is effected, the annual income available for schools should be increased by about \$350,000.

General sales taxes have been newly enacted or reenacted in Missouri, New Jersey, New Mexico, Ohio, North Dakota and other states. In Colorado the governor vetoed an income tax measure partly on the ground that it was unconstitutional, whereupon the legislature adopted a concurrent resolution to submit a constitutional amendment to provide for an income tax. Generally the movement toward limitation of property taxes and the correlative adoption or increase of income, inheritance and sales taxes continues. The long overdue modernization of state taxing systems seems to be progressing more rapidly than ever before, but much remains to be done.

State Responsibility for Education

By S. H. McGUIRE

SENSING the implications for education of increasing financial stringency, I began in 1932 a study to evaluate the administrative statesmanship which was being displayed in attempts to meet a deepening crisis in education.¹

The intolerable inequalities in school facilities and tax burdens existing among small districts within the same state are the result of a narrow tax base unwisely restricted to a small area and to a property tax.

A mass of striking facts leads to the conclusions that when other things are equal the smaller the unit of support the greater are the inequalities; that the resources of the state wherever found may properly be taxed by the state to maintain a desirable educational program for all children of the state; that the equalization principle is justified on the social theory that the educational offering will enhance the public welfare and that the state cannot afford to permit the rise of an illiterate citizenry, and that the state is the most desirable political unit to act as the equalizer of educational opportunities.

The practice of forty-four states that have attempted to equalize educational opportunities reveals important trends in statesmanlike methods of solving the financing problem. These trends point to the abandonment of the property tax, to the use of an income tax, to statewide efforts to equalize

assessments, and to increased state aid. The extent to which states are accepting the responsibility of giving increased aid to local school units is encouraging. Delaware has a statewide school system except for the city of Wilmington; in 1933, North Carolina took an additional step and established a complete state-supported and state-controlled school system of eight months; in 1933, California increased state aid to \$60 for each elementary and \$90 for each high school pupil, without compelling the county to make any contribution, and Washington enacted a law providing 25c per pupil-day of attendance for a minimum of 2,500 pupil-days. Changes have been made in other states during 1935.

The situation in every state demands that the state assume the job of educating its children (perhaps aided by the federal government), determine the educational objectives which are essential and set up a program for their attainment, adapt its organization for performing the increased task, and supplement sufficiently the legal financial efforts of the local districts, in order that acceptable educational results may be achieved. Precedent and reason exist for placing more and more of the burden upon the state. Moreover, experience has pointed the way. For the guidance of administrators attempting to work out a plan of equalization, I have derived helpful principles from the experience of the several states and from educational theory tested experimentally.

¹Trends in Principles and Practices of Equalization of Educational Opportunity, by S. H. McGuire, Peabody College for Teachers, 1934.

St. Louis as Host

The Department of Superintendence at Work

By A. J. STODDARD

THE sixty-sixth annual convention of the Department of Superintendence will be held at St. Louis, Feb. 22 to 27, 1936. Not since 1912 has the convention been held in that city. Of late years, the convention has reached such a size and its demands have been so great, not only for sleeping room accommodations but for meeting hall and exhibit space, that only a few cities have been able to accommodate it. St. Louis, with its new auditorium, is in position to act as host.

The municipal auditorium, located in the downtown hotel district, is one of the largest and most beautiful in the country. Its main arena has a seating capacity of 12,000; its opera house, 3,500. In addition, there are four halls seating 750 each. Over twenty-five assembly rooms, seating from 50 to 300, are also under its roof. When one sees the auditorium, one is impressed not alone by its size but by its atmosphere of luxury. The appointments of the grand lobby are regal—marble columns, gilded ceiling, opal-flashed amber glass chandeliers, soft velvet draperies and deep carpets. The

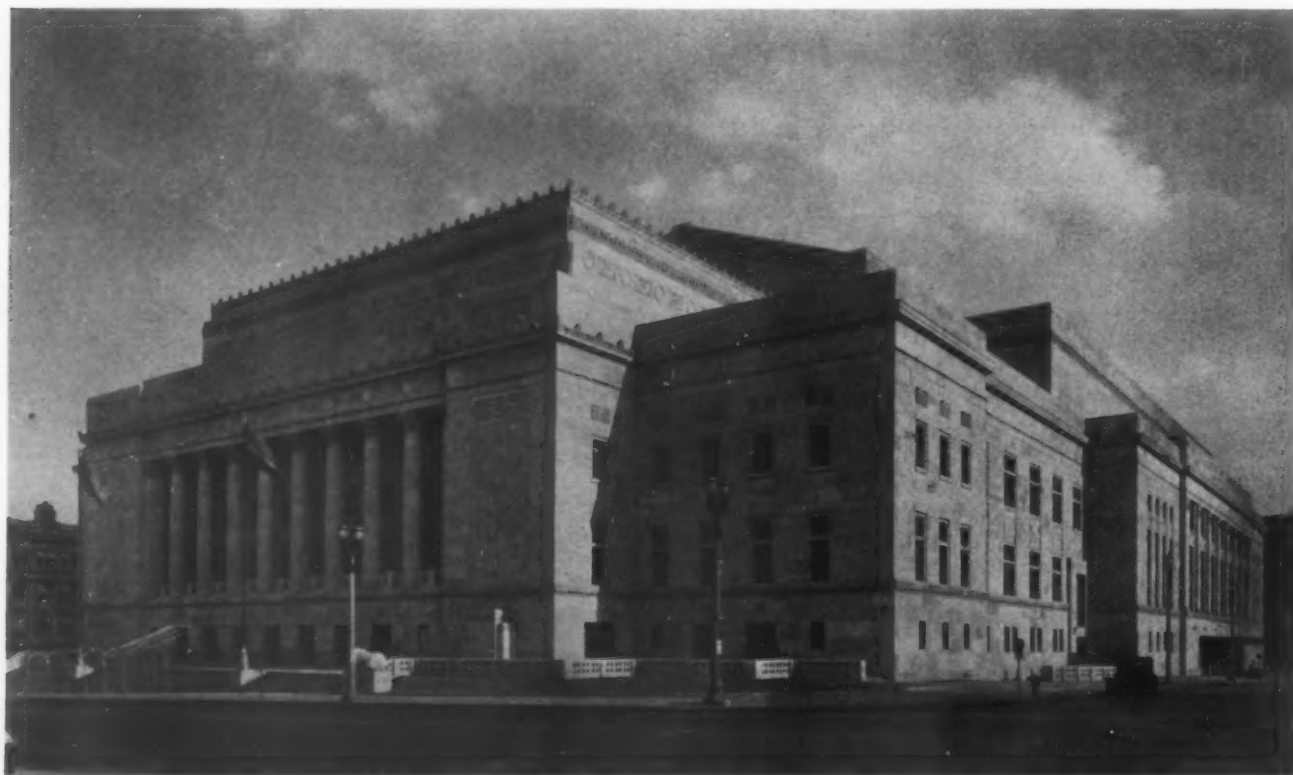
Department of Superintendence, with its many meetings in session simultaneously, will be well accommodated here.

The commercial exhibits form an important educational feature of the convention. Here are assembled unlimited displays of books, maps, globes, and every other item found in the class-

room or laboratory. The exhibit hall within the auditorium will house the exhibits adequately.

Judging from advance sleeping room reservations, the convention will be one of the largest the department has ever held. Within two weeks after the announcement of the convention city, two of the principal hotels were completely sold out for the convention period. Several of the other hotels were also heavily booked. Single rooms are scarce. Whenever possible, double occupancy should be requested. Applications for accommodations should be addressed to Philip J. Hickey, chairman, Housing Bureau, 911 Locust Street, St. Louis.

A number of organizations meet regularly immediately preceding the convention of the Department of Superintendence. Among those that have completed arrangements are the National Association of Deans of Women, February 18 to 22, Hotel Statler; American Association of Teachers' Colleges, February 21 to 22, Jefferson Hotel, and National Vocational Guidance Association and affiliated groups, February 19 to 22, Coronado Hotel.



In this splendid new building the next Department of Superintendence convention will be held.

A Statewide Pay-as-You-Go Policy for Local Building Costs

By A. V. OVERN

THE progress made in any phase of education to meet modern conditions is likely to promote complementary changes in other divisions of that endeavor. The fruit born by progressive thinking in the two matters of (1) determining the best district organization for conducting schools and of (2) ascertaining the most social ways of raising and distributing tax money for current expenditures may stimulate an attitude to equalize school building costs also.

There are four ultimates in a state's fulfillment of its constitutional responsibility for education. They are as follows: (1) taxation which taps equably all evidences of ability to pay rather than mainly real estate ownership; (2) an organization into districts for local control which are large enough to include the "automobile community" and sufficiently populated to furnish pupils for a twelve-grade unit, a rich curriculum and rooms for atypical children; (3) equalized distribution of all school income for current expenditures, and (4) equalized support of present debt service and the cost of all new school buildings throughout the state.

Example of Equalized Current Burdens

As an example of the type of progress in equalization of current burdens which could carry over into debt service and new capital outlay, consider recent happenings in the troubled state of North Dakota. The statutes which provide for state aid for effort to maintain standards became inoperative in 1933 through lack of appropriations to carry them out. In that year a small amount was appropriated into a newly created state equalization fund. The latter was to be distributed, one half to the local school districts in proportion to the number of children of school age, and the other half to those elementary schools which could not raise enough money by local taxation to pay their own minimum operating costs and the tuition for those pupils who attended high school elsewhere. In 1935 the appropriation for this equalization fund was increased to a possible \$3,728,000 for the biennium.

Here is a plan in which all the people of the state pay for school buildings as they are built. It saves all interest charges, which usually amount to from 60 to 100 per cent of the initial building cost. Rural communities are served as well as cities, but no building is permitted unless it is needed

At an earlier time in the development of the high school the encouragement of the effort of districts through subsidies was undoubtedly justified by its results in enriching the school offering and extending the number of grades included. That is true even though such stimulation aided those districts most which needed help the least, and even though it caused relatively impoverished districts to appear to lag even further behind in the relative advantages they offered than before state aid was provided.

Now high standards have been established. The pace has been set. To meet current conditions, it seems most important to extend the Elysian fields of educational opportunity to every one equally. The problem which gives greatest concern now is the inability of thousands of school districts to provide the opportunities which nearly every one feels are his own right or the heritage of his children. Such opportunities should be assured to every citizen. That makes it necessary not only to equalize the burdens of operating and maintaining school plants and providing instructional and other services but also to relieve the present burden of debt service and the necessity for any district to contract unreasonable debts for any future building needs. The following plan shows how this can be done at a minimum cost.

It is the purpose here to suggest a practical way for a whole state to subsidize a pay-as-you-go

policy of defraying local school building costs. This plan should apply equally well to the rural sections of all states. Although the matter of equalizing building costs is bound up with the problem of reorganizing school districts, the plan could be applied in states in which districts have not yet been reorganized scientifically.

According to its provisions no district should be permitted to build unless the proposed building would contribute to the largest public welfare educationally. The state department of education should study building needs over large contiguous areas to determine whether any local community's planned educational and building program would harmonize with the proper educational development of the state. Thus the department of education would gradually gain invaluable experience in the use of necessary checks and balances to ensure an economical and democratic operation of complete state support when that eventuates.

No more new buildings would then be permitted to be built in small, inefficient one-room school districts as now constituted. In sparsely settled areas some schools of fewer than twelve grades would be permitted, upon study and conviction on the part of the department of education that larger districts would be impractical there. Local control would be respected in initiating proposals for new buildings, choice of architects and contractors, and details of construction. Educational standards for new schools would be set up by the department.

Details of the Plan

In general the plan used should provide for the following policies:

1. A definite amount of money for public school debt service and new buildings should be levied each year by the state. This should come preferably from such sources as income, sales or other taxes aside from real estate.

2. The total amount levied should be at least the average annual amount spent locally for debt service and new buildings throughout the state for the preceding five years. (Some other fair basis might be used to determine this levy instead of the one here suggested.)

3. Purely as a matter of bookkeeping, the department of education should allocate the amount collected proportionally to each school district according to the number of children from birth to 21 years of age, but the money should not be distributed to the districts.

4. The money should be used to pay all current interest and bonds of school buildings and build as many new school plants as could be paid for in cash each year.

5. A district would be permitted to build only

when it could justify its action on the grounds of service and economy.

6. The state department of education would determine what constituted adequate service and economy.

7. No service should be deemed adequate which did not provide for twelve grades in each district, with special classes for atypical children and provision for adult evening classes.

8. No building would be deemed economical unless there were enough individuals under 21 in the district to complete the structure at a reasonable cost for each. The reasonable cost would change with prices of building materials and labor and somewhat with the density of population and transportation requirements.

9. The instructional service would be thought economical only in case the merged territory could supply a reasonable enrollment of pupils of school age for all twelve grades.

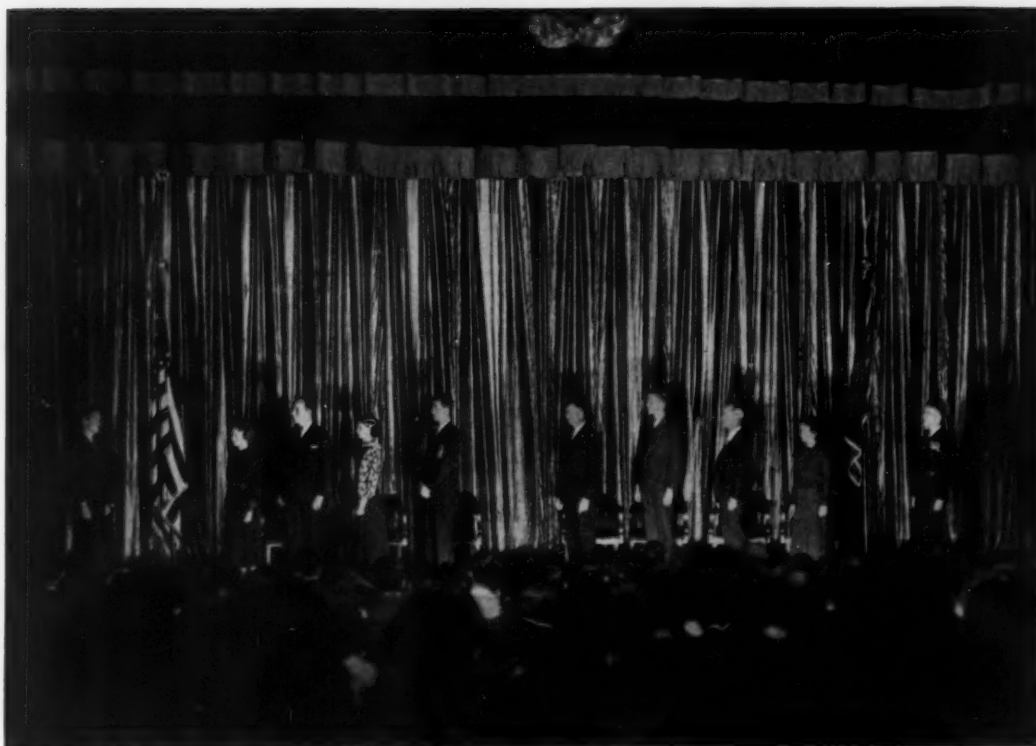
10. Every new building would be paid for in cash at the time of its completion.

11. The applications of local districts for new buildings would be granted in the order of their acceptance until all the money for any year was exhausted, provided the applicants presented plans which fulfilled the requirements for economy and adequacy specified by the department of education.

12. The bookkeeping done by the state for local districts would show to what extent opportunities were equalized for all children of school age. On the other hand, small districts could secure such opportunities for themselves only by merging with enough other territory to make a centrally located building practicable according to state standards.

Savings Effected by the Plan

Thus all the people of the state would pay for school buildings as they were built. All interest charges for new buildings would be saved. The small amount of tax money allocated to buildings would be in the nature of an insurance charge, which would dispose forever of the bugbear of levies for debt service by school districts. The usual cost of interest is from 60 per cent to 100 per cent of the initial cost of the building. Small communities always have to pay this cost under present conditions. Thus those that can afford the least expenditure and that obtain the fewest advantages from their expenditures must also pay the most. The suggested plan ought to relieve the burden of building schools at its sorest spot. It ought also to ensure more adequate school plants throughout a state and an equitable distribution of costs. Like any other delicate social machinery, however, the operation of this plan should be carefully controlled to avoid making it a "pork barrel."



A Color Ritual for High School Use

By LILLIAN SHUSTER

HAVE you seen 700 of today's youth of the land, senior high school pupils, stand at attention as the flag of our nation passes? Have you seen 700 pupils join wholeheartedly in a pledge of allegiance? Have you seen a student body with the proper mind-set for a dignified assembly program without special caution from the powers that be?

These questions have been answered in the affirmative by assembly visitors in Ponca City Senior High School, Oklahoma. The student body has changed from a disorderly, careless, thoughtless group into an alert, responsive, reverent group, respectful of the rights of others and ready for the program of the day whether it is entertaining or of a more serious type. This change was brought about by the use of a color ritual, which was planned and adopted by the pupils themselves. A brief description of the color ritual follows.

After the pupils have gathered in the auditorium for assembly, events take place in the following order.

1. Six persons appear on the stage and are seated, three at the right and three at the left. The three at the right are the pupil who leads the student's creed, the pupil to have the devotional part of the ritual, and the song leader. Those at the left are the principal, the pupil chairman, and the day's honor guest. This is the signal for the house to come to order.

2. After a slight pause, these persons stand, the house lights are turned off, the student body stands at attention. "The Star Spangled Banner" is played on the piano, and the American flag and school flag, a spotlight from the balcony on them, are carried down the aisle to the stage by two pupils. A pupil to lead the pledge of allegiance walks between the flags, as they come single file down the aisle. The American flag is placed at the right and the school flag at the left in sockets in the stage floor.

3. With the spotlight on the American flag, the pledge of allegiance is given by the student body,

led by the pupil selected for this responsibility. This pupil and the one who carried the flag stand by the flag until one verse of "America" is finished, and then go off stage at the right.

4. The student body sings one verse of "America," led by the song leader.

5. The spotlight is then changed to the school flag, just as the designated pupil on right stage steps forward and leads the student body as it repeats the creed.

The Student's Creed is as follows:

"I believe in Ponca City High School and in the things for which she stands — health in body, honest work, generous comradeship and reverence for the spiritual. I believe in achievement and I pray for forcefulness to accomplish what I set out to do. I believe in loyalty to our school and her traditions. I pledge upon my honor to help in all her undertakings, in all that will make her a stronger and nobler school, and I promise to do all that is within my power to become a student to match our building."

6. The student body sings "Ponca City, We Love You," led by the song leader, who wrote the words and music to the song. The pupil who carried the school flag is selected from the home room which won the school spirit contest the preceding semester. He stands by his flag until the school song is finished, when he goes off stage at the left.

7. An appropriate passage of Scripture is read and an original prayer is given by the other pupil on the stage at the right. At the conclusion of the prayer, an Amen Chant is sung softly off stage by a group of pupils, while the student body sits or stands with bowed heads.

8. This concludes Part I of the assembly program, and Part II begins with the principal's introduction of the pupil chairman of the day.

9. The pupil chairman presents any guests of honor, and all parents or patrons in the audience. This list of guests is handed to the chairman by a representative of the reception committee of the student council.

10. The chairman explains or introduces the special program of the day. Those on stage for the color ritual go off stage, the curtain is raised and the program proper begins. (The ritual is staged "on the apron" in front of the curtain.) The special program, Part II, is arranged by the assembly committee from the student council.

11. At the end of the special program, the two flags are carried to center stage and held there, and the student body stands at attention while "The Star Spangled Banner" is played again on the piano. This ends the assembly program.

This general plan gives ample opportunity for pupil participation, for pupils to assume responsibilities in planning and executing the program, and for cooperation between leaders and the student body as a whole. This plan links the student body with the student council, the home rooms, and the speakers' bureau, which selects those who participate in the ritual. Thus the assembly tends to unify the school and to create a spirit of cooperation and general good will.

The color ritual prepares the pupils for a program of the dignified type. The ritual is reverent and beautiful enough to inspire respect and a willingness to listen. Visitors are consistently impressed with the reaction it has upon them and the student body. It has done much in solving the problem of assembly conduct and interest. This attitude justifies such a ritual and declares it desirable. Pupil attention and response are much better at general assemblies, where the ritual is used, than at pep or special assemblies.

Birthplace of Higher Mathematics

Fifteen centuries before Euclid and Archimedes devised their famous mathematical processes in ancient Greece, the Babylonians in Asia Minor were regularly using identical methods in solving astronomical and other scientific problems.

Proof that credit for many of the early achievements in algebra and geometry must be passed back from Greece to the Babylon of Old Testament times rests in the engraved surfaces of a number of Babylonian and Egyptian clay tablets which have lain for years in the Louvre in Paris, and in a Moscow museum, their importance overlooked by research workers.

The true significance of these bits of clay has been revealed by Prof. Otto Naugebauer, a Jewish scholar of the University of Göttingen and elaborated by Prof. Louis C. Karpinski of the University of Michigan, who has long

predicted that discoveries in Egyptian and Babylonian remains would fill in important gaps in the history of mathematics.

Not only did the Babylonians deal in plane and solid geometry, but they also solved complicated cubic and quadratic equations by algebra, and in trigonometry had computed the chords of a circle by the so-called "Pythagorean formula." It is possible that the advances made in algebra by the Arabs, themselves an Oriental people, were founded largely on a continuation of the ancient Babylonian mathematics into the eighth century A.D., Professor Karpinski believes.

That the Babylonians were able mathematicians has been suspected because of the high development of their astronomy, but the fact that the fundamental and many of the more complicated operations used daily by modern scientists and engineers were developed around 1800 B.C. comes as a "revolutionary discovery in the history of science," according to Professor Karpinski.

What Industry Expects of the Schools

By E. E. SHELDON

TIME was when the male of the species engaged in the occupation of teaching as an interim job, to gain the necessary funds to pursue a course in law, medicine or theology. The advent of the college man in business had not then made serious inroads into the teaching field.

Today we as teachers should like to regard our positions as at least semiprofessional in character and somewhat permanent in tenure despite the arraignment of professional training schools for teachers by modern critics.

Many in public school positions look longingly toward a college position as a desideratum for the oncoming old-age period, or they regard a business connection as being more permanent and less influenced by the political changes that more or less affect the permanency of school posts.

A few views from a teacher who left a public school position to train young people for industry may be of interest. The cooperative spirit between schools and industries seems to be a trend in present day education. It may be possible further to develop this spirit and to develop more training courses linking schools and industries. I hope the time may soon arrive when the teacher in industry will be as common as should be the business man in the schools. In that new day the ripe experience of the older teacher will be welcomed in an advisory capacity and no longer shall we hear of teaching as a poor profession for one to grow old in. Constructive criticism of beginning teachers and assistance to those doing poor teaching could well be given by older teachers who are familiar with conditions both in schools and in industries.

A few snubbers that have not been perfected and are not patented but, when properly applied and carefully adjusted, will spare beginners in business a few jolts may be of interest to teachers who are preparing pupils for later employment.

The average product fresh from grammar school, high school or college has little of salable value to the business concern. A large amount of information not immediately usable is the chief characteristic of the product. This characteristic is of great

potential value and in due course will be duly appreciated and become the outstanding quality of the product.

If, to the principal characteristic of the raw product, certain work habits are added, the product will immediately become of more value and can be absorbed readily for current use.

The first lessons that can and should be learned consist of an appreciation of the value of time and of the cost of materials. Modern scientific management depends upon the accurate measurement of time. All work can be on an estimated time basis, and quality should be standard, so that all records can become time-basis records with standard quality. Time is valuable and material costs money; both these facts must be impressed upon the school

Ten Steps in Training Pupils for Business

1. Assign lessons properly and train pupils to follow instructions or orders.
2. Evaluate all work and accept none not up to standard and not accomplished within the time limit.
3. Insist upon proper preparation of assigned lessons and discourage tendencies to wander away from the topic.
4. Train pupils in definite accomplishment. They must learn the thorough preparation of essentials.
5. To train in common honesty, accept no work that in any way shows evidence of not being the pupil's own efforts.
6. To emphasize the value of the signature, scrutinize all excuses and papers and compare them with signatures on file in the office, as is done in banks with check signatures.
7. Insist upon the proper evaluation of time and materials, since these are principal factors that fix the selling price in industry.
8. Give each pupil some responsibility, for the worker is paid to accept definite responsibility.
9. In mathematics, demand 100 per cent accuracy.
10. Teach pupils to get along with one another, to ignore their likes and dislikes, and to learn to meet conditions as they are and then work to better them.

pupil until they become so real that the habits of promptness, of saving and of prevention of waste will be acquired.

In a business concern to follow orders is vital. How may the raw product be duly impressed with this fact? Lessons may be clearly assigned, and then prepared according to definite instructions and not accepted until the specifications have been complied with. When the English teacher insists upon the same degree of accuracy in the mechanics of English that is imposed upon the printer, then and only then will the use of English become dependable, and evidence tends to prove that as the mechanics of English improve so will the general quality of work improve.

Accuracy as a habit can be acquired and will stand one in good hand. One hundred per cent accuracy in mathematics should be the standard, for on what other basis can one operate a business? "Good enough" and "getting by" have no justification in modern business, nor should the terms be in any pupil's vocabulary if he expects smooth riding in business.

A sense of responsibility for tasks assigned means much in a busy business world. A messenger may alienate a perfectly good customer by failure to assume proper responsibility for the message he was to deliver or the order he was to pick up. By attention to details a messenger often wins promotion and rapid advancement.

Attention to details is necessary for each person who has anything to do with planning or carrying out instructions. Specifications must be clear, definite and complete if the customer is to be satisfied. Too many young people assume the attitude that it is beneath them to attend to details and to assume

responsibility for assigned tasks. Whatever ability or aptitude for work one may have, the wrong attitude of mind will ruin all chances for success. Someone must attend to details to have any assigned task properly accomplished.

Reliability is the acid test of a person in the business world. Let us call things by the right names in the schools and save heart pangs in later years. The pupil who obligingly signs a fellow pupil's excuse may little realize that signing another's name to anything is forgery, and as such is a criminal act in fact, if not in intent. We must make this a serious offense in the schools and save our pupils from a more serious later offense. Those who would scorn to steal will copy from another or from books and hand in the work as original. Again, let us call the act by its correct name, and the sting may break a forming habit and prevent serious theft in the years to come. The souvenir hunter is a species that should be exterminated, and the habit of "lifting" another's property be it public or private must be broken.

To get along with others is a virtue that should be cultivated. Pupils must be taught to ignore their likes and dislikes and to learn to meet conditions as they are and then work to better them.

Good habits are a matter of growth and cannot be acquired overnight, nor can bad habits be dropped as can a hot iron. Each lesson should have a share in building character, and probably no method will ever be evolved that will replace the earnest, thorough teacher who sees beyond the class exercise and realizes that to have a share in the perfect fabrication of a most valuable product is a privilege beyond compare, and that the psychology wage received should be ample recompense.

Book Sales in a Specific Field

Sales data for twenty-three books dealing with the teaching of arithmetic, representing the publications of fourteen companies, reveal the following facts:

1. The average book is sold to the extent of about 3,000 copies in its first year.
2. The second year is the best year in the life of a publication in this field. Average sales in this year amount to nearly 5,000 copies.
3. After the second year, there is a gradual decline in the number of copies sold per year. The average number sold is about 3,000 in the fourth year, 2,000 in the sixth or seventh year and 1,000 in the tenth year.
4. Individual publications vary greatly, not only in the number of copies sold but also in the extent to which they last. Whereas, on the average, the number of copies sold decreases each year after the second, some publications rally after the third or fourth year.
5. Total sales for twenty-three titles through 1933 amounted to more than a half-million copies.

6. In a typical year prior to the time when the influence of the depression was felt, the total sales of the books whose records were studied were about 40,000 copies.

7. The banner year for sales of books in this field was the year 1927. In this year, the total sales for nineteen titles were 57,000 copies.

8. Sales of books in this field have experienced a marked decrease in recent years, owing to the depression. The effects of the depression were not greatly felt until 1931 but the total sales for 1932 were less than half of those for the typical predepression year and less than a third of those of the banner year, 1927. The 1933 sales are apparently less than a third of those of the typical predepression year.

9. On the average, a book dealing with the college teaching of arithmetic is sold to the extent of about 25,000 copies in the first ten years.

10. It is estimated that the downward trend in sales experienced in 1931 and 1932 has continued in 1933 but at a slightly reduced rate.

These facts are presented by R. L. Morton, professor of education, Ohio University, Athens.

Some Trends in the Junior High School Curriculum

By HARL R. DOUGLASS

IT IS interesting to review the ferment that has characterized thinking about the junior high school curriculum and to note some of the movements which seemed so certain to bring about definite changes but which now seem to have spent themselves or at least have undergone modification.

In the first place from about 1895 to 1915, when the arguments in favor of the reorganization of secondary education were being formulated and urged upon us, one of the principal features proposed for the new school was the earlier introduction of secondary education. This suggestion came principally from two sources — college presidents who wished to have students enter college earlier and in larger numbers, and students of foreign educational systems. It is fortunate that this proposal has found only a limited application in actual practice. The earlier introduction of foreign languages, mathematics and classical and near-classical literature would have indeed been a step later to be undone.

Little Value to Majority of Pupils

Composite, general or unified mathematics, as originally planned, would have provided not only for the earlier introduction of much algebra, trigonometry and geometry of little educational value to the great majority of pupils found in grades seven and eight but the inextricable entangling of less useful aspects of these subjects with the more useful arithmetic which ministers to the present and future needs of junior high school pupils. In fact, it is clear that, in the interest of the pupil as well as of mathematics as a school subject, from 40 to 60 per cent of the material now taught in ninth grade school mathematics should not be taught in the junior high school at all.

This material, largely algebra, can be justified as being of more value than other subjects that might be taught instead only for those pupils who will later pursue collegiate studies based upon mathematics. Reason would seem to indicate rather clearly that it be divorced from those phases of algebra that should be of value to all pupils and transferred to the senior high school, there to be combined with other materials into a rigorous

course in college preparatory algebra for a limited small group. To the algebra left in the third year junior high school curriculum, such as the use and evaluation of formulas, the fundamentals of negative and literal numbers, graphical representation and similar material of more common application in the life of people generally should be added two types of materials.

One of these includes those aspects of elementary statistical methods which will enable pupils to read intelligently the increasing number of articles and books on scientific, sociologic and economic topics that employ statistical methods of thinking and presentation, and which will assist them to discover and appreciate the significance of relationships between any two variables. These relationships are in actual life rarely those represented by the algebraic equation, which assumes perfect correlation, represented by a coefficient 1.0, between the two variables, so that when the value of x is known the value of y is determined and may be calculated with no error of estimate at all. The relationships that exist between variables in most situations in life are not so definitely fixed, but are such as is represented by coefficients of correlation of less than 1.0. Things tend to go together; certain effects tend to go with a certain cause or set of causes; rarely is the relationship exactly proportional.

A Better Type of Training

Much more useful in most walks of life than mastery of simultaneous equations, factoring and special products or the more intricate types of fundamental operations in algebra are the concepts and the abilities to think in terms of measures of central tendency, variation, probable errors of estimate, probability and relationship. In fact, it would seem that for many types of college curriculums, training in the simpler phases of algebra and in the more useful aspects of elementary statistical methods also constitutes a better preparation than continued training in algebra. Furnishing as it does means of comprehending large groups of cases and relationships that otherwise would confuse the normal mind, it would seem that train-

ing in statistical methods offers opportunities for clear thinking superior to those of geometry.

The second type of content that should be emphasized in the third year of junior high school mathematics includes those phases of arithmetic which are mathematically hard to master or which are related to civic, business or other economic activities of life that can be understood but hazily by boys and girls twelve to fourteen years old.

The introduction of a foreign language before the ninth grade can hardly be justified except in larger schools, where it may be offered as an additional elective for bright pupils. The theory that because they were younger and their speech organs more plastic, pupils in seventh and eighth grades would make greater progress than in the ninth and tenth grades in mastering foreign languages has not been supported by results obtained.

More Thorough Mastery Is the Real Need

In general, the tendency to crowd down into the junior high school materials formerly taught in these fields in the senior high school seems to constitute an undesirable practice founded on loose thinking and fallacy. Instead, what is really needed is a more thorough mastery of the fields already taught in the junior high school. Textbooks in United States history are written in such style and vocabulary that for a great proportion of pupils the material in them has little meaning other than the raw material for memory exercises stimulated by the prospects of oral recitation and written examination. The words are learned but the ideas are seldom well understood, much less retained. The amount of materials included in courses in history and social science is so great as to demand a greater time allotment or a thoroughgoing elimination of topics of lesser value. The needs of junior high school pupils demand instructional materials in history and social studies that will reveal in terms understandable by pupils of from twelve to sixteen years of age the character and nature of our institutions, the facts concerning which they strive to acquire for temporary reproduction.

It is gradually becoming obvious that the course of study materials in the nonvocational subjects are pitched for the abler half of the pupils. Much of the instructional materials in literature are too advanced, and the concepts and vocabulary of the subjects too mature. High school teachers have heretofore been willing apparently to accept ridiculously low levels of achievement rather than to modify the curriculum to fit the needs and abilities of pupils. The futility of closing one's eyes to these things has become obvious to some.

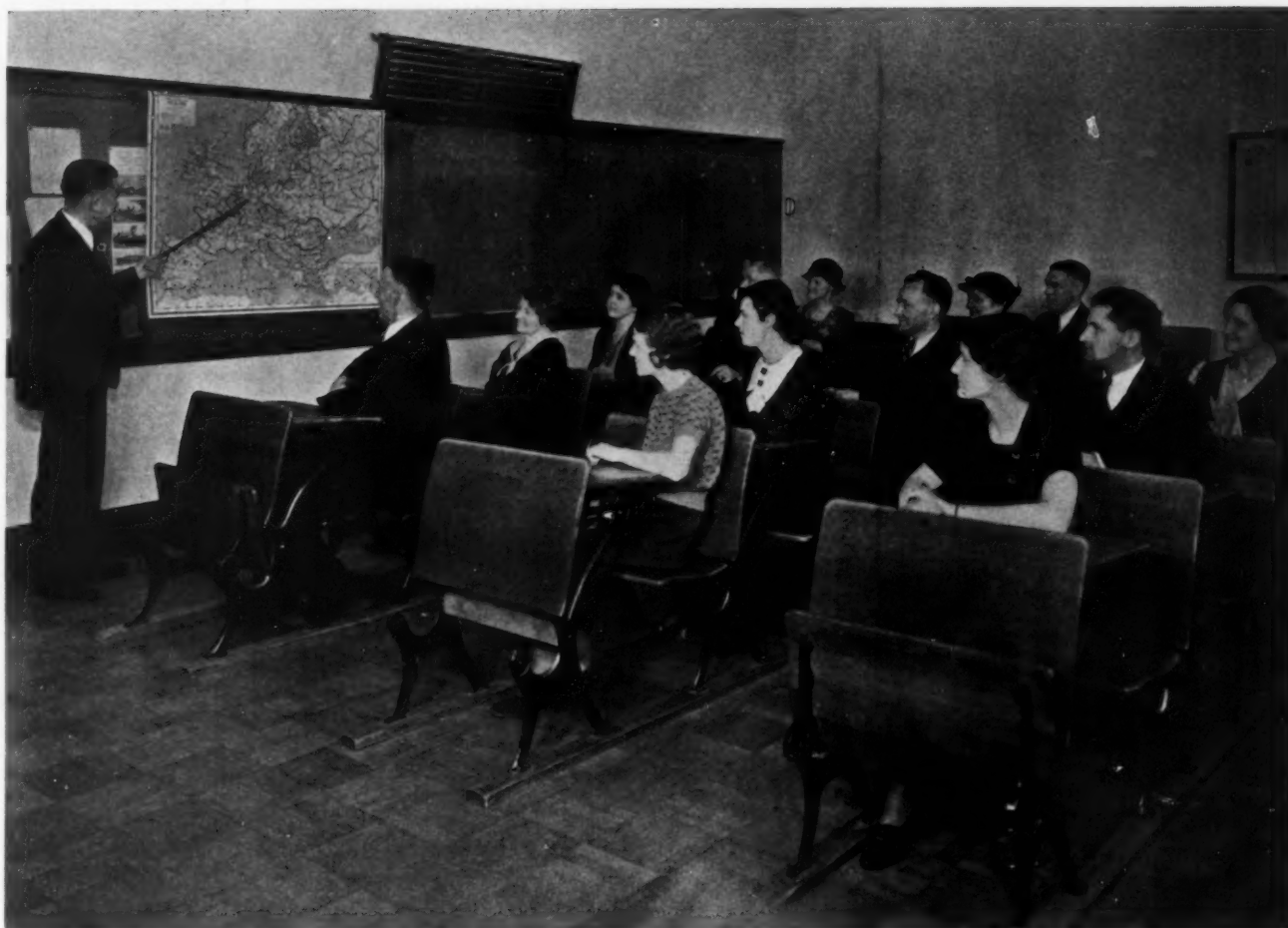
Pupils decipher rather than translate Latin and French. One half of our high school pupils

toward the end of a year in algebra are unable to find the area of the circle when they are given the formula and the values of π and r . Half of our high school pupils having had a year of American history are unable to define the Monroe Doctrine. It would seem obvious to everyone but school teachers that we are trying to do too much and too difficult things and that we are failing to do the simpler and more essential things well.

Provision for enjoyable use of leisure is not well made through instructional materials of the highest level class alone. It is not practical to assume that any great proportion of pupils may be educated in the junior high school to spend any great proportion of the vastly increased amount of leisure now available in consuming or producing the type of literary or artistic product that forms the greater part of the course of study in art, literature and music. Indeed, until teachers in these fields are able to shake themselves free from standards impractical for children, there is little hope that the instructional materials that they employ will be more than hurdles to bar the way of those who are not precocious or hypocritical and to crowd from the curriculum materials that give greater promise in the development of good leisure habits. The course of study in literature, for example, must be such as will develop in junior high school pupils interests and reading habits in materials that there is some rational basis for believing will constitute the means of expenditure of much leisure time with satisfaction to the individual and profit to society.

Plan Has Been Proved to Be Unwise

Some of our early attempts to adapt the curriculum to the vocational needs of junior high school pupils have not proved wise. The attempts to introduce technical vocational education in printing, stenography, shop work and other subjects did not fit in with the fact that pupils dropping out of school before reaching the senior high school could rarely find employment in these fields and the fact that satisfactory levels of achievement in these fields were rarely attained in the junior high school grades. In the light of what we now know about the careers of junior high school pupils who drop out of school before completing senior high school, technical vocational education does not seem adapted to their needs. Instead broad fundamental exploration and informational courses in business and shop activities are serviceable not only to those who do not go on, but to those who supplement such courses with specific vocational education in the senior high school and college. The same is true of intelligent correlation of the content of academic subjects with vocational applications.



Adult Education in a Rural School

By E. A. FRIER, JR.

THE past quarter century can tell the story of the flowering of popular education for farmers. In its present status it is the largest enterprise in adult education in America measured in terms of money expended and in numbers of persons professionally employed and of people served. This article describes an extension of adult education service for truly rural citizens as it has been developed by the King Ferry Central Rural School in New York State.

The board of education has dedicated the services of this school to the community, old and young alike. As a definite part of this work, a program of adult evening courses was first offered during the months of March and April, 1934, with satisfying results.

The first step in administering this adult school was to enroll the groups who were interested. In February, 1934, a circular letter was sent to every one in the school district. In this letter the courses were carefully outlined and the general procedures

to be followed in enrolling. News stories were written for the local paper and further announcements were sent home by the school children.

As a feature of general interest, the first meeting of the adults was opened with a fashion show, presented by the homemaking department of the school, assisted by local women and girls and by the costume department of a prominent store in a near-by city. The attendance was around 200. Immediately following the fashion show, instructions concerning registration were given; 87 adults enrolled that evening, and before the courses ended 104 persons had attended classes.

To determine the needs and interests of the adult group, some direct questioning was done in the community. The teachers worked as a committee in crystallizing the subjects that were suggested. It was decided that the following subjects were apparently most desired: home economics, agricultural economics, rudiments of music, world affairs today, orchestra, and typewriting. A tenta-



All of these students in typing are farm women. They liked the course so well that they kept on coming once a week after the adult evening school closed for the season. Below is a sewing class in which clothes were planned to conform to the personality of the wearer.

tive program for the next year was outlined, the proposed courses being English literature, grammar, physical and biological science, French language appreciation, music appreciation, use of the library, dramatics, public speaking, physical education, and a continuation of the music, typewriting, home economics and agricultural courses offered the first year. These were the subjects, then, that were taught this spring.

A unique feature in the adult program in the King Ferry school is the fact that the entire program is carried on without additional cost to the

school district other than the opening of the school building for the class meetings. All of the teachers are regular teachers in the central school, with the exception of the district superintendent who conducts the class in world affairs. The teachers are chosen in relation to their training and experience in the subject matter called for in the courses offered.

Classes in the adult school are held two evenings a week. The evening is divided into two fifty-minute periods, in order to allow each person the opportunity to choose two courses. Classes start at 7:30 and end at 9:30. Occasionally twenty-minute assemblies are held at the end of evening sessions at which music and short talks are given for the entire adult school. The class groups meet in the departmental rooms of the central building.



The question is often asked, "Just what is taught in the courses given?", so I am outlining briefly each of the courses.

In homemaking the following topics are studied: personality and its effect on choice of clothing; color readings and personality analysis of class members; choosing accessories and their appropriateness for wearer and occasion; making of clothing, covering the use of pattern, short cuts and common techniques; cosmetics and how to use them; the school lunch, and the pure food and drugs act and how it affects the average homemaker.

In the course in agricultural economics, a review and discussion of Henry A. Wallace's agricultural theories, stated in the pamphlet "America Must Choose," was studied the first year. The NRA and the New Deal and their effect on agricultural adjustments, applying for production credit, and the New York State agricultural outlook were studied. Facts about present and probable state prices, supply and demand for farm productions, farm supply or other influences that will enable a farm family to plan its business and personal affairs most wisely were discussed.

The course in rudiments of music offered music reading with the use of syllables; explanation of

the different key signatures, the value of notes, rests, etc., and practice in part-singing. The objective of this course is the formation of a community choral club. The orchestra class was restricted to those who possessed a playing knowledge of an orchestra instrument.

Twelve adults enrolled in the course in typewriting. This group continued their typing work throughout the remainder of the school year, meeting one evening a week.

"World Affairs as We Are Living Them Today" proved to be the most popular of the courses offered. There was an average attendance of 60 adults each evening. The course included a study of Japan and the Far East, United States' sphere of influence, sore spots of Europe, dangerous international policies, the Russian experiment and America's future.

Examinations are not given in any of the courses offered. At the close of the session an assembly program is presented, at which time a certificate of attendance is granted to those who have completed the course. The certificates are presented by the president of the board of education. The adult orchestra plays and a speaker of prominence talks on adult education. Seventy-eight certificates of attendance were presented the first year.

University of Florida Organizes New College

By WALTER J. MATHERLY

THE new General College at the University of Florida will bring to every 1935-36 freshman a broad cultural survey of the basic fields of knowledge regardless of the branch in which he wishes later to specialize. The old established colleges and professional schools of the university have been moved to the Upper Division. Consequently the prospective doctors, lawyers, engineers, teachers and others will be grouped together in the General College and will be required for the first two years to pursue programs of general education which are in the main identical.

The four comprehensive courses which will make up the regular freshman program next fall are: Man and the Social World; Man and the Physical World; Reading, Speaking, and Writing; Man and His Thinking and General Mathematics.

The sophomore program to be offered in 1936-37 will consist of two comprehensive courses — one in the Humanities and the other, Man and the Biological World — and three elective special courses prerequisite to admission to the colleges and professional schools of the Upper Division.

While many features of Florida's unique plan have been adapted from experiments and procedures found the world over, Florida is the first state university to require all students to pass through the General College. The plan assumes that certain general education of a basic nature is needed by all students, thus the General College will strive to offer the student a key to intelligent citizenship.

The materials to be presented in the new comprehensive courses are being selected so as to fulfill the eight major objectives of the college, which are to develop the abilities of the student: (1) to acquire and maintain a maximum degree of physical and mental efficiency; (2) to use effectively the tools of thought and speech; (3) to share fully in the changing duties and responsibilities of citizenship; (4) to understand the scientific method and to become familiar with the relationships among, and the contributions of, the various sciences; (5) to appreciate the best in religious and philosophical thought; (6) to enjoy literature and the other arts and to grow in appreciation of esthetic values; (7) to choose wisely an occupation or a profession, and (8) to make an intelligent use of leisure time.

The General College has dispensed with clock hours, class grades, and semester hours' credit as prerequisites to the completion of its program. The candidate for graduation will be required to demonstrate that he has actually acquired and developed certain abilities, understandings, appreciations and skills. These will be measured by comprehensive examinations. The superior student may do independent out-of-class work so that he may pass the required comprehensive examinations in less time than the usual two years.

Admission to the university is now to be based on complete profile charts of the applicant which show not only his credit-record but his consistency of progress, personal qualities, principal's recommendation, and level of achievement.

Happy To Say —

ARTHUR MORGAN considers the most productive field of endeavor for education to be the reconstruction of government to the end that industrial management, finance and business, which have largely controlled political power, may be subordinated to a government for the general good. Our republic started as a great experiment. Experimenting stopped almost at once. In its place has grown the boast that the Constitution was inspired. We have accepted government as is, privilege holding the power. Today there is a chance that government for the general good shall gain control. To make the generation understand this contest is education's job.

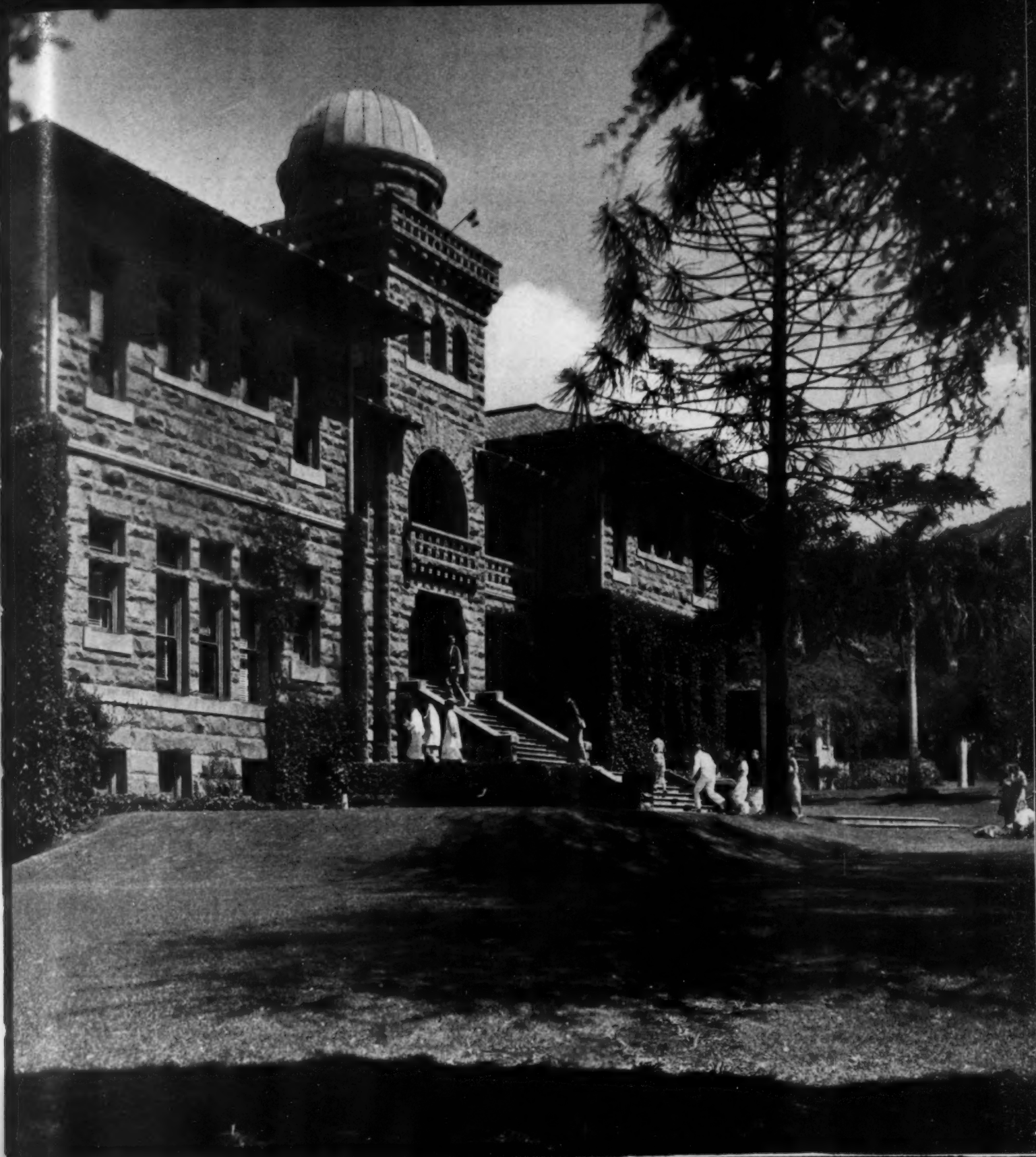
AS TO the rebel in the ranks, honest figures showing the progress of his pupils as compared with those of other teachers are always available. If they show superiorities, his rebellion may have good reason. As you make clear that every reform you start is "an experiment," you can change without loss of prestige.

IT SADDENS me to hear honest John Shannon say it is a rare school at any level in which there will not be a shout of joy at an announcement that the place will be closed for a few days on account of an emergency. Alas, you are right, John, but even the best homes see a child glad on being sent away for a day or two to visit. Change, said old Heraclitus, is a sort of delight. Maybe if teachers were not also elated by notice of a shutdown, children's joy at suspension of classes would not be so keen. It is certain that if you emit, every now and then, a remark that you are finding great pleasure in school, the teachers become affected by the contagion. For it is a sign of intelligence to be more keen for vocation than for vacation. Also note that Mr. Shannon says, "it's a rare school—." To make yours a rare school of this kind, isn't it an adventure worth all the talent you can command?

AMONG the incidents showing why you and your Parent-Teacher Association are due to fight the motion picture managers in your town, you may observe, as William Kimmel has done, that small boys who formerly played Indians are now playing racketeers and gunmen. Somebody is undoing much of the hardest work your schools attempt. This is happening in your own town. Whose town is it?

FEELING tired and stale, men are often seen rushing into some recreation that only tires them more. They are like lambs trotting into Wall Street because others do. A grown person ought to know what things refresh him and to use them for refreshment. Recreation is for creating more vitality, not for wasting it. You see more people debilitated by overplay than by overwork. A business executive's job makes him concentrate more than if he were a schoolmaster. He is pulled; you have to drive yourself more. Any play that doesn't give you a stronger drive is waste.

Wm McAndrew



THE SCHOOL PLANT

Punahou School in Hawaii Nears

By J. S. SLADE

PUNAHOU, oldest private school in the United States west of the Rocky Mountains, will soon celebrate its hundredth anniversary. Founded in Honolulu in 1841 by American missionaries for the education of their families, Punahou has shown steady growth, and today is recognized as the leading private undenominational school in the territory and one of the finest in America. From its portals have gone forth U. S. senators, governors of the territory, leading financiers, executives, scientists, musicians, artists.

Many years before Hawaii became a part of the United States, children from California were sent to this school for their education, as no school facilities existed on the Pacific Coast at that time. Parents sent the children to Honolulu because of the high scholastic reputation Punahou had earned and to avoid sending them to the Atlantic Coast via Cape Horn or subjecting them to the perils of the overland journey.

In 1820 — at a time when the Hawaiian Islands were in moral confusion — a group of Christian missionaries from New England arrived. They were kindly received, and although subjected to

many hardships and difficulties, made rapid progress in educating and converting the people. Not many years later schools and missions for the Hawaiians had been established on all the islands.

By 1840, the mission work had been under way twenty years. Ten or fifteen families of missionaries numbering from five to nine children each were engaged in the work. Children of the first, or pioneer, missionary company had been sent back to the States for their education. The sole exception was the Bingham family from which former U. S. Senator Hiram Bingham is descended.

Led by the Binghams, a number of other families decided that a school for their children should be authorized in Hawaii for they dreaded for their boys and girls the journey around the Horn to New England. The American Board of Missions saw the need and granted permission for a boarding school to be started, naming the Rev. Daniel Dole of Boston as principal.

Land now forming the Punahou campus had been given to the Rev. Hiram Bingham by Liliha, wife of Boki, governor of the island of Oahu, and was passed on by Mr. Bingham for a school site.

Building was begun immediately. The structures were of adobe, one story in height. Doctor Judd, head of the family from



The famous lily pond on Punahou campus. A legend concerning its origin gave this private school its name.

Century Mark

Old School Hall at Punahou is still in use. Founded by American missionaries in 1841, this school taught boys and girls from California fifty-seven years before Hawaii became a United States territory.

which descended Lawrence A. Judd, former territorial governor, personally supervised the erection of the first building.

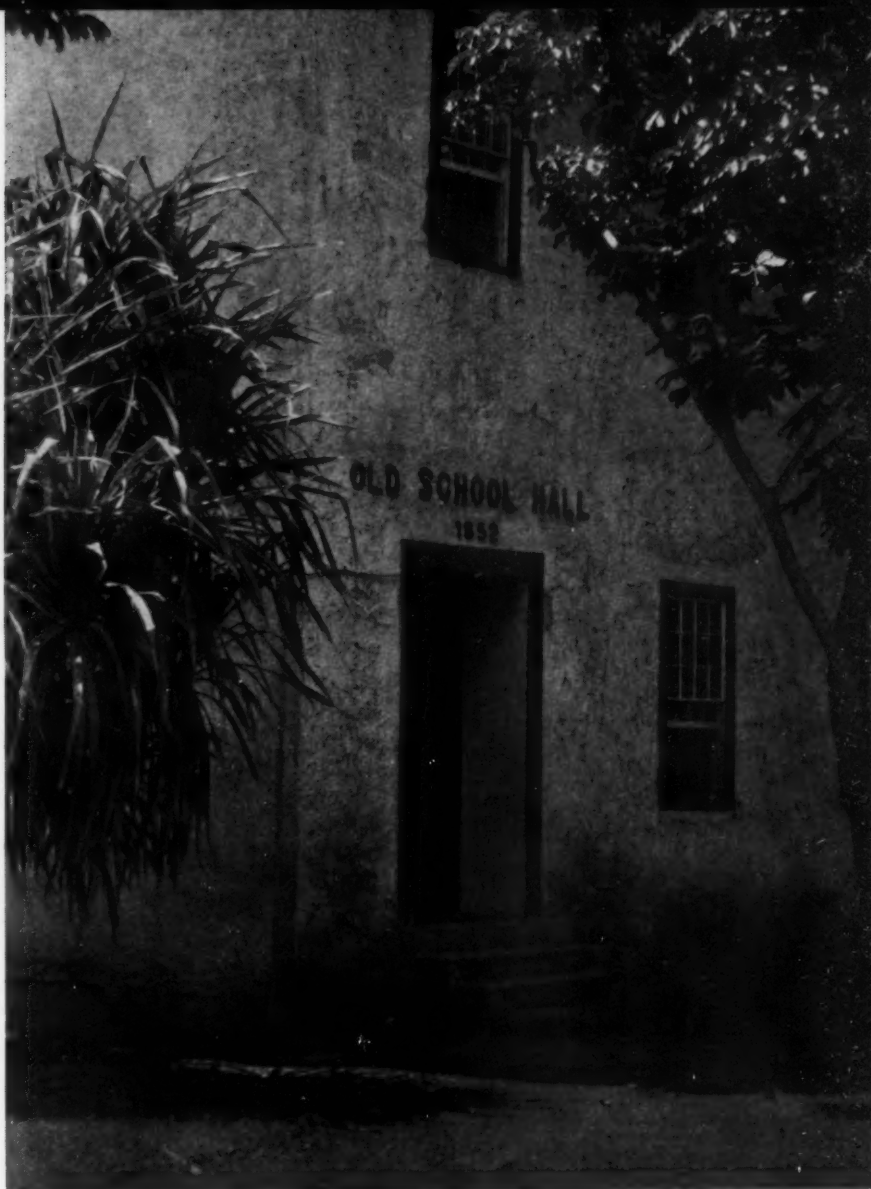
Scholars of the earlier years were exclusively the children of missionaries to Hawaii with the exception of Sarah and Mary Leslie, daughters of a Methodist missionary in Oregon. Later, children from California were accepted in answer to urgent pleas from there. California at the time was a wilderness and no educational facilities were in existence.

Punahou has a rich background of tradition, faith, devotion and hardship nobly borne. It is difficult for a person to realize in the modern American Hawaii, where he is surrounded by all the comforts and advantages of civilization, the conditions under which that little group of early missionaries labored. The sturdy stuff of which they were made supported Punahou through many periods of trial and supports it even now, for many among the present trustees are descendants of the founders.

Inspired by its traditions, the school continues to emphasize not only physical and intellectual training but development of character, love of service and respect for labor. Its charter as a corporation, granted in 1853, commands that the school be non-sectarian.

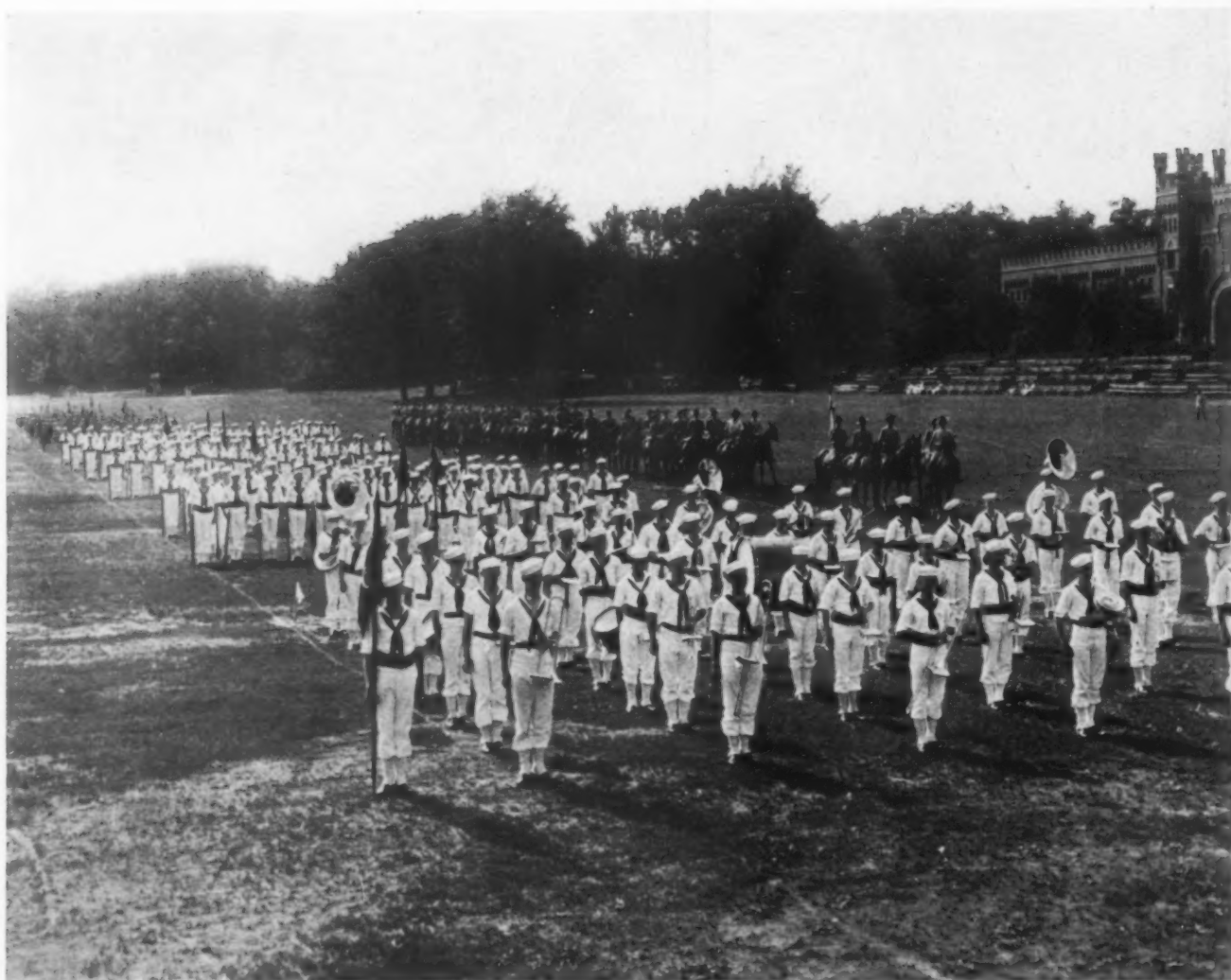
As a preparatory school Punahou always has been classed as an equal of the best in other parts of the United States. Punahou graduates enter Harvard, Yale, Princeton, Cornell and other prominent colleges.

Punahou's campus is rich in Hawaiian lore and history. The school received its name from its famous lily pond, called in Hawaiian "Punahou" or "new spring." The story of the lily pond relates



that a drought came to Hawaii and many people died for lack of water until an old man, inspired by a dream, pulled up the trunk of a tree and water bubbled forth, forming the lily pond still existing today. The home of Boki, the chief who gave the original grant of land, was near the spring. The Rev. Mr. Bingham's house, one of the first American homes in Honolulu, stood near the same spot and today is marked with a bronze plaque.

Schools and departments maintained by the trustees of Oahu College, the name under which Punahou's charter was granted, include: Punahou Academy, senior division, which includes sophomores, junior and senior classes of the usual secondary courses; Punahou Academy, junior division, consisting of the seventh, eighth and ninth grades; Punahou Elementary School, comprising the first six grades of the primary and grammar school; James B. Castle School, offering courses in home economics and manual arts; Punahou Music School, offering instruction in music to the public as well as to Punahou students, and the Punahou boarding department for girls.



Washing and Cleaning for a

NUMEROUS advantages have been discovered by Culver Military Academy in the operation of its own laundry and dry cleaning services. Prior to the construction of its laundering plant and the installation of dry cleaning equipment, the school laundry was done under contract in a town fifty miles from the campus, and the dry cleaning was done in another town fifteen miles distant.

Immediately noticeable were the savings in time and cost of transportation. To the academy itself there was the further advantage of not being forced to carry such large stocks of waiters' suits, bedding and table linens for the mess hall. More than all these, the chief advantage proved to be the economies resulting from the operation of these two services themselves.

Under the contract system, the average cost of all laundry, personal and institutional, was \$0.125

By EARLE HITCH

per pound. During the first year of operation, the academy laundry handled 331,374 pounds of laundry at an average cost of \$0.068, which covered not only direct charges for labor and supplies but indirect charges for plant maintenance, insurance, depreciation and 4 per cent interest on the investment. At this rate of saving, the entire investment of approximately \$60,000 will be amortized in less than five years.

Installation of dry cleaning equipment, using the new carbon tetrachloride process, has resulted in even greater operating economy. Under the contract system, the average cost per garment was approximately \$0.24 (uniform blouses, breeches, overcoats, flannel shirts and sweaters). During the first ten months of operation, the acad-



The corps of cadets at the Culver summer schools. Keeping these lads in immaculate white duck makes the Culver laundry a busy place.

Military School

emy plant cleaned 28,077 garments at an average cost of \$0.1127. Expressed in terms of cost per pound, the contract system cost was \$0.142 as compared with \$0.069 under academy operation figured on the same inclusive basis as laundry costs. The entire cost of installation, approximately \$2,400, will be amortized in a little more than one year.

This has enabled the academy to pass on to the ultimate consumer, in this case the members of its student body, the savings in the form of a service much more satisfactory than could be provided under the outside contract system, and a 50 per cent increase in the number of garments handled for the same price that prevailed before. Each cadet is now permitted to turn in thirty pieces a week, where under the old plan he could have only twenty pieces without extra charge.

The institutional laundry, concerned with only

one kind of patronage, can concentrate all its attention on the needs of the school and is able to meet almost any demand. For instance, when the members of the corps of cadets made ready to attend the world's fair in Chicago in the summers of 1933 and 1934, they expected to be absent several days. For such a trip laundry is a particular problem to the midshipmen of the naval school, of whom there were some three hundred. The midshipmen require a complete change of their white duck suits at least once a day.

Before the corps left it was necessary to provide each member with a laundry supply sufficient for four or five days. This extraordinary load was met by the laundry, in addition to its regular services, by increasing the period of operation so that the work was turned out over night.

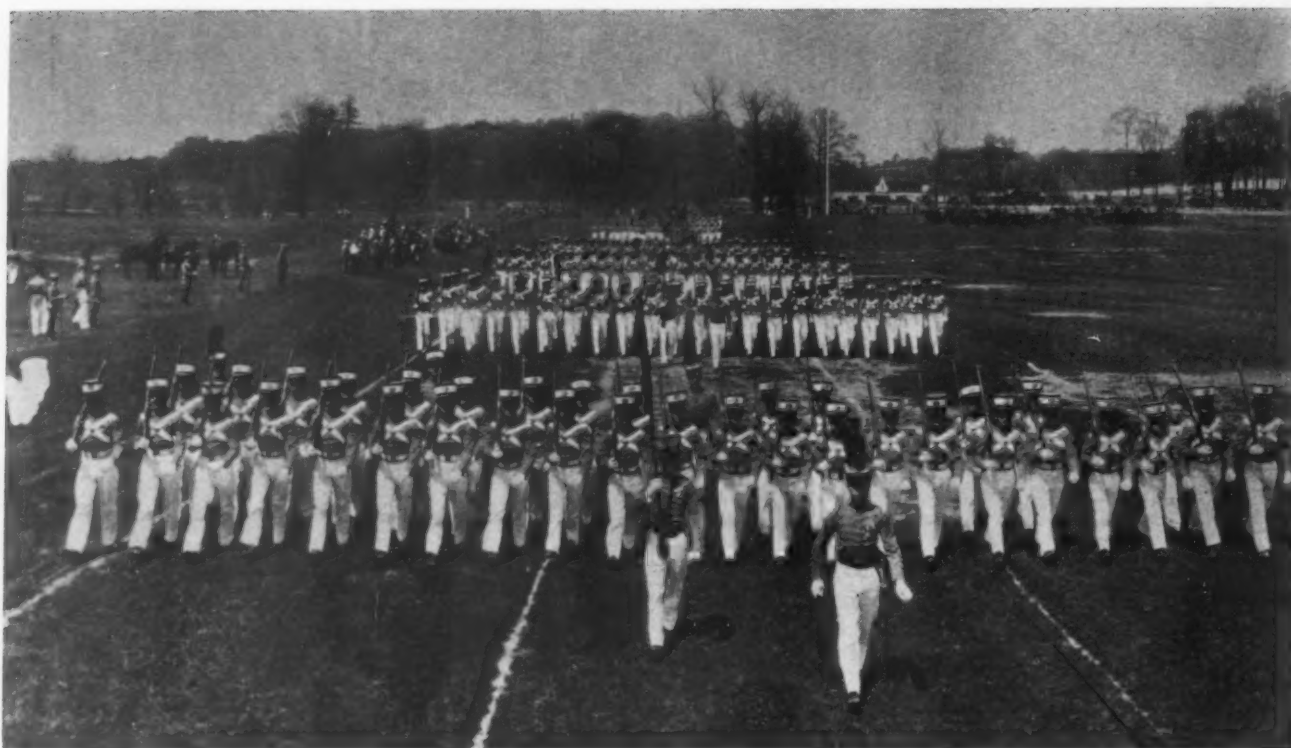
Taking care of such peak loads without disturbing regular services is made possible by adherence to a standing weekly schedule. Each organization in the corps has a day for taking its garments to the laundry, and a day for calling for them. Table and bedding requirements are handled on other days. These days are staggered to distribute the load evenly over the week.

In the dry cleaning plant a much better service is offered than is practicable for commercial plants to provide at present prices. This plant is used most during the winter session, as the uniforms then worn by the cadets are light gray and light blue woolen garments. The exacting requirements for trimness and spotlessness prevailing at Culver make it necessary to hand these garments to the cleaner frequently. The shop has been adjusted to fill the particular needs of the cadets, and it functions to their complete satisfaction. A two-day service is provided. The cadets take their garments to the shop on their way to breakfast one day, and have them back in their possession shortly after noon on the next day.

One of the most gratifying factors in the laundry operation is the virtual solution of the lost garment problem. Practically no claims for damages have arisen. Since the opening of the present session last September only one claim has been made up to May 1. This is the record in a plant doing the complete laundry service every week for approximately 400 individuals.

The academy constructed its laundry in 1931, appropriating about \$60,000 for this use. It is a one-story brick building, 60 feet wide and 100 feet long, with steel sashes in every wall, allowing an abundance of light.

The equipment consists of three washers, one ten-foot flat work ironer capable of ironing 70 square feet of fabric a minute, one dry room tumbler, six sock forms, one shirt pressing unit with



finishing tables, six garment presses, two extractors and a water softening system.

The machines are operated by an electrical control panel, and canopies with exhaust fans to carry off the condensation and provide more comfort for the operators have been placed over all of them.

The maximum capacity of this laundry is about

two tons a day under general conditions. The monthly average is about 25,000 pounds and the annual volume is about 300,000 pounds.

The dry cleaning plant handles about 5,000 pounds a month during the winter. The total number of pounds handled by it in the session of 1933-34 was 45,627, representing a total of 28,077 garments,

or an average of two and one-third garments per week per cadet. A year before this plant started operation at the academy the service enabled each cadet to have only one-half this number of garments a week.



Above, full dress parade at Culver. The white "ducks" make heavy work at the laundry, a view of which is shown at the left.

Eliminating Extra Costs in Construction

By FRANK M. MISNER

School officials change their minds, or someone remembers something that everyone forgot, and those extra costs, dreaded by every builder, mount higher and higher. The proper preliminary work, if conducted by experts, will eliminate most of the extra cost of a building project

AN ALMOST universal complaint is that of owners against extra costs incurred in the construction of their buildings. School buildings are typical in this regard. It is seldom that a schoolhouse is erected without extra cost, and there are instances where the sum of these extra costs have exceeded 10 per cent of the total of the original contracts. School boards and taxpayers complain about these extra costs just as individual owners do, and often rightly. Unless extras are anticipated and controlled, they may be a source of delay and excessive cost to the school district.

In this discussion, the term "extra costs" is used to designate any payments made to building contractors or to architects for work in connection with the erection of the building which was not covered by the original contracts between these individuals and the board of education, both as to the definition of the work to be done and the total payment to be made. The term "extra" is used to denote the item for which payment is made.

Space does not permit a complete discussion of the causes of extra costs.¹ The following is only a partial list of these causes.

In general, school officials have not attached sufficient importance to the preliminary work,

based on the educational nature of the proposed building, which should be done before architects are called in.

The educational program, based upon a building survey and upon the school's philosophy of education, should be definitely determined. The size of classes, the room schedule needs and the relationship of spaces to one another should be decided upon, and the architects furnished with a complete statement of spaces as soon as they are commissioned.

The decisions concerning the broad policies involved in this should be made by the board of education, but the preparation of the statement of spaces should be the work of educators. If the local school administrators are not qualified to do this task, specialists in the planning of school building programs should be called as educational consultants to make the building survey and to advise with the board of education, school administrators and architects in the planning of the building.

Failure to plan equipment and equipment placement in its final form before letting contracts is one of the most prolific causes of extra costs. As education becomes more specialized this type of extra tends to increase unless it is prevented by a sound procedure.

Educational Program Worked Out First

As indicated above, the educational program of the school should be worked out before building plans and specifications are developed. The desired equipment and its placement should be considered in detail. In this planning the school staff should have its share, and the classroom teacher should be given an opportunity to contribute suggestions. Spain, Moehlman and Frostic emphasize this need of an early beginning in the following statement:

"In point of time for study, equipment policies and requirements must be worked out before edu-

¹For a detailed discussion of the causes of extra costs and a check list for their prevention see "Extra Costs and Incidental Costs in the Erection of School Buildings," by Frank Misner, Contributions to Education, No. 624, Teachers College, Columbia University, New York, 1934.

cational planning is started. The need for this is obvious. The type of equipment determines to a large extent the space requirements.²

The responsibility for developing the plans and specifications for equipment should be in the hands of someone well qualified for the particular task. There is no reason why this person should be the architect. The specialized nature of the task often means that it should not be delegated to the architect, but rather to an educator trained in developing plans and specifications for equipment. The person selected should be commissioned at an early date and he and the architect must cooperate.

Boards Have Many Afterthoughts

Boards of education have been particularly responsible for the type of extra which is the result of an afterthought. The reasons for this are many. In some cases the preliminary educational work has not been done, or has not been delegated to the proper officials and hence not done well. In some instances the boards have not had sufficient time to consider the problems before them, or have wasted their time considering details which should properly have been given over to specialists.

A skillful salesman with something to sell or an influential citizen with a pet idea have often caused a board of education to change its mind. It would do well to select educational advisers and architects in whom it can repose confidence, and then limit the changes made after the contracts have been let to those suggested by these experts.

A school building program worked out in accordance with the suggestions of authorities in this field, based on a carefully developed educational plan and allowing more time before contracts are let, would undoubtedly result in most of the worth while items being thought of in time to prevent extra costs.

Wherever a school building may be constructed there are usually individuals or bodies having statutory power to regulate certain features of the building. There will be other bodies that may be able to give valuable advice on other features. If the regulations are not met in the plans covered by the contracts, it is likely that extra costs will result.

When valuable advice pointing to a change in plans is secured after the contracts are signed, school officials are usually forced to choose between two evils, namely, losing the benefit of the advice or allowing an extra cost.

The more common agencies which have regulatory power or may give valuable advice are the fire department, the water department, the board of

health, the building department, the light and power company and the board of fire insurance underwriters.

It is the duty of the architect to ascertain the agencies to which he should submit his completed plans and specifications or their pertinent parts. This should be done in time for any necessary changes to be incorporated in the plans and specifications on which bids are based. It is definitely the responsibility of the board of education to allow the architect sufficient time to do this. The board's administrative representatives should then check to see that he has performed these duties.

There is also the possibility of new developments which may occur after the contracts are let but before the building is completed. The field of audio-visual education, in which a phenomenal development has taken place during the last decade, serves as a good illustration. When such developments make a change desirable and this change can be made more economically during the construction of the building than at any subsequent time, it is the part of wisdom to allow an extra cost.

Code for Drinking Fountains

The older type of insanitary drinking fountain in which the water can fall back on to the point of discharge is still in use in some schools and playgrounds.

Specifications for drinking fountains sponsored by the U. S. Public Health Service and recently approved by the American Standards Association are as follows:

1. The fountain shall be of impervious material, as vitreous china, porcelain, enameled cast iron, other metals, or stoneware.

2. The jet shall issue from a nozzle of nonoxidizing, impervious material set at an angle from the vertical. The nozzle and every opening in the pipe or conductor leading to nozzle shall be above the edge of the bowl, so that the nozzle or opening will not be flooded if the drain from the bowl becomes clogged.

3. The nozzle shall be protected by nonoxidizing guards to prevent the mouth or nose of the drinker from coming in contact with nozzle.

4. The jet of water shall not touch the guard.

5. The bubbler and bowl of the fountain shall be free from corners difficult to clean or which would collect dirt.

6. The bowl shall be so proportioned as to prevent unnecessary splashing, at a point where the water falls into it.

7. The drain from the fountain shall not have direct physical connection to the waste pipe unless trapped, in the same manner as a regular plumbing fixture.

8. The water supply pipe shall have an adjustable valve fitted with a lockshield or with an automatic valve permitting regulation of the rate of flow of water to the fountain.

9. The height at the drinking level shall be convenient to most persons using the fountain. Step-like elevations may be provided for children.

10. The waste opening and pipe shall be large enough to carry off the water promptly. The opening shall have a strainer.

²Spain, C. L., Moehlman, A. B., and Frostie, F. W., *Public Elementary School Plant*; a discussion of the general principles underlying the educational designing of the public elementary school plant together with a practical technique. Rand McNally & Company, Chicago, 1930, p. 517.

Wood Has Service to Perform in School Building

By WALTER H. SCALES

THERE are many places about the modern school building where wood can be used to advantage from the standpoint of economy as well as that of beauty and utility. Ways of utilizing lumber have undergone great changes in the last twenty-five years, but the place of wood has remained little altered with respect to interior finish and built-in equipment.

Wooden floors, for example, have suffered little from architectural change and still are found to possess certain distinct advantages. Wood window frames and sash likewise have their own strong

adherents and wood as applied to interior trim, door frames and doors appeals to the esthetic sense as well as to the pocketbook. In recent years solid boards and plyboard or synthetic wood applied to walls have proved to be an effective substitute for plaster.

A certain element of resiliency is inherent in a wood floor, both structurally and superficially. This element of resiliency may seem to be somewhat intangible and unimportant to those who have not experienced the steady pounding produced by constant walking over a cold, unyielding surface. Med-



This California school of earthquake resistant construction is all wood, except stucco veneer, including window sash.

ical authorities, however, are agreed on the detrimental effects of such an experience when repeated frequently enough.

When the floor structure is of materials other than wood, it is generally covered with a wood floor set on "sleepers." In this manner, much of the resiliency otherwise sacrificed is retained. This resiliency causes a cushioning effect underfoot, making the floor comfortable to walk upon or to stand and work on.

Like most other worth while things, good wood floors are secured only by taking pains. Unsatisfactory floors may result from adverse conditions or from ignorance or carelessness in the making.

In residential buildings and in many other occupancies the accepted floor construction is of lumber joists or floor beams on which are laid first a sub-flooring and then a finished floor. The following precautions should be observed in its construction.

Only thoroughly seasoned lumber should be used. When lumber is first cut from the log, it is green and has a considerable amount of moisture in the wood fibers. As this moisture dries out, the wood begins to shrink a little and will continue to do so until it has dried out as far as it can under the prevailing temperature and humidity to which it is exposed.

New discoveries in the treatment of wood flooring with oils and chemicals go far toward preventing even the slight "come and go" of well seasoned flooring. These treatments tend to prevent wood from taking up or giving off moisture under changing air conditions and reduce the consequent change in width of flooring. It is difficult to describe these treatments as most of them are effected with proprietary formulas. Some of the most successful involve impregnation of the wood, under pressure, with a chemical compound of which linseed oil is the chief ingredient.

Methods of Floor Treatment

One favored method, without pressure, applies a liquid "sealer" which is rubbed in well with a lamb's wool mop. The floor is then cleaned with steel wool to remove surface gloss, after which two coats of "undercoater" are applied, this being followed by the finish. There are many sealers and undercoaters in use. Specifications for government buildings usually stipulate that sealers be "a thin liquid preparation having high penetrating qualities" and containing from 14 to 26 per cent of such solids as varnish gums and nitrocellulose. Thirty per cent of the solids must be insoluble in water. Undercoaters are of creamy consistency with 12 per cent or more of varnish gum and wax.

Many sealers on the market infiltrate into the wood and furnish a marked degree of protection

against moisture. A test of a sealer is to pour ordinary writing ink on white maple flooring after the sealer has been applied, and, when the ink has dried, see if all signs of ink can be removed by wiping with a cloth and rubbing with steel wool. It is obvious that such treatment would protect the floor against imbedding of dirt and stains as well as against moisture.

A good grade of building paper between sub and finish flooring also helps to slow up moisture changes. Seasoned lumber, used in combination with either or both of these precautions, will afford a thoroughly satisfactory floor and one which takes full advantage of the beauty and other valuable properties of wood.

Hardwood floors are suitable throughout any school building, and edge-grain hard pine, Douglas fir and Western larch flooring are frequently used with satisfactory results. It must be remembered, however, that school children's feet, although small, are not always light of tread and are frequently shod with hobnailed boots, which play havoc with any floor surface not resistive to attrition. For that reason floors of oak, beech, birch and maple give the most satisfaction.

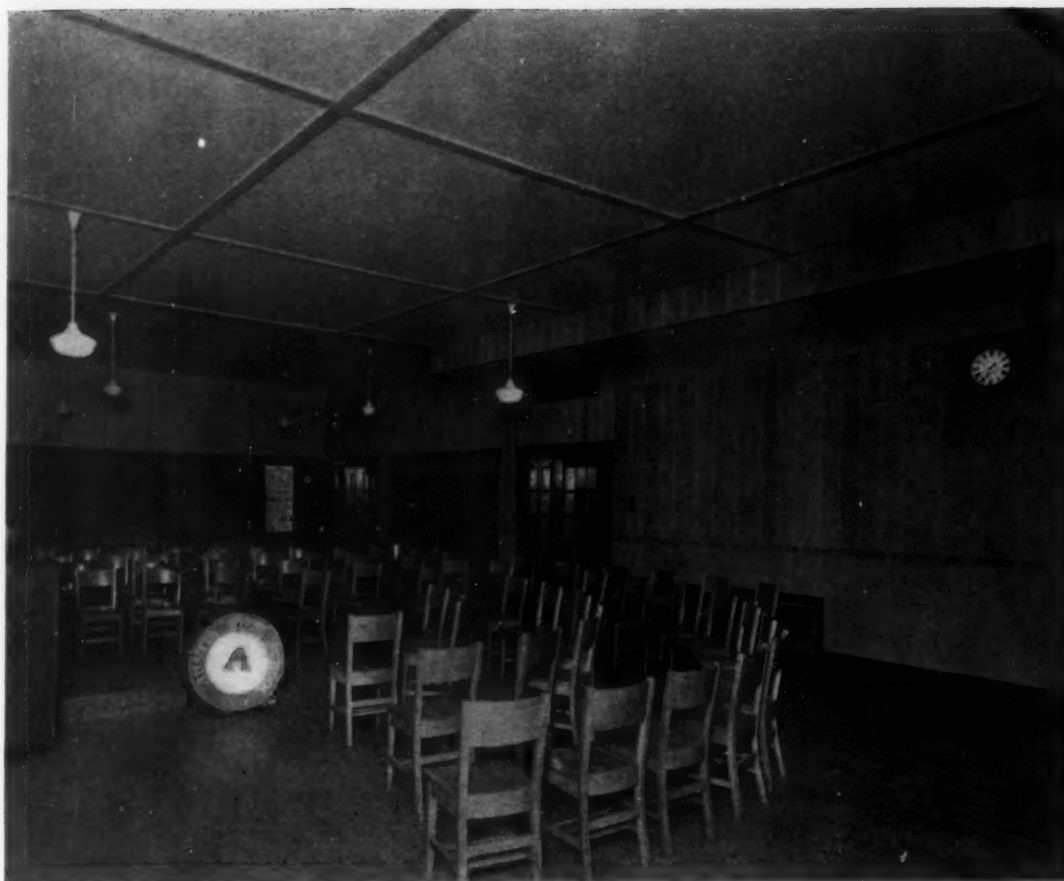
Wood Floors Will Outlast Building

Properly selected and installed wood floors will outlast the life of the ordinary building, especially in the case of schoolhouses where use is so frequently cut short by obsolescence. Comparison of the first cost of wood flooring with that of other materials is difficult because of the variety of grades, yet it will probably be found that a serviceable grade of hardwood flooring can be installed at a price as low or lower than that demanded for an equally acceptable competing material.

It is true that occasional refinishing may be necessary in the case of wood. This, however, may be cheaper over a period of years than the complete replacement necessary with some other materials.

Wood window frames and sash, too, often find favor with teachers chiefly because of their noiselessness and the ease with which they may be opened and closed, entailing a minimum interruption of study or instruction. The heat insulating faculty of wood is an important factor in schoolhouses with many windows. The criticism is offered that wood sash and frames are combustible. Yet no window is more fire resistant than its glass, which heats rapidly regardless of its thickness or the material used in the frame. Wood does not twist and buckle, and thus break the glass and admit flames.

The fact that wood is a nonconductor of heat assists to maintain an even classroom temperature during severely cold weather. The snug fitting sash



The music room in the high school at Austin, Minn., is finished with synthetic wood panels, and the ceiling is sound absorbent.

halts infiltration of cold air, as evidenced by the engineering standards of the National Association of Heating and Piping Contractors, which give the lowest degree of cold-air infiltration to double-hung wood sash. Entrance of rain and snow is practically impossible with well-made and fitted sash.

The use of wood sash and window frames suggests wood interior trim, door frames and doors. These equipments undoubtedly present an appeal to the esthetic sense, but the economy factor is usually the major consideration. As a usual thing, the cost of wood trim will average from 10 to 15 per cent less than that of substitutes.

In structures in which trim is subjected to careless or destructive usage, wood has the advantage, when marred or scratched, of being readily refinished to match the rest of the surface. Replacement of any badly damaged or defaced part can be easily effected at a minimum of cost and delay and with the sort of local labor always conveniently at hand.

An objection usually offered to wood door and window frames is that they slow up construction. The argument is that walls must first be plastered and then allowed time to dry thoroughly before the wooden frames can be installed, in order to obviate shrinking and swelling caused by moisture. With the "build-dry" method, however, plaster is done away with entirely. This method of construc-

tion calls for the use of solid boards and plywood or synthetic wood panels instead of plaster. Such surface panels now come in large sizes of 3, 5 or 7-ply and offer broad expanses free from defects, which can be quickly nailed in place. They may be painted to suit any color scheme or stained and covered with a transparent varnish which will expose the beauty and grain of the wood. With the aid of stock moldings, these wall coverings can be made to imitate expensive paneling. There is an increasing use of knotty vertical boards. The chief advantage of wood finish lies in the fact that the building is dry throughout erection and there is no absorption by other materials of the moisture thrown off as plaster dries. When wood is used, doors and window frames — also floors — may be installed before or after the wall panelings are put up.

Incidentally, it is interesting to note that the school authorities of California, because of constantly recurring earthquakes, have returned extensively to all-wood, one-story construction of schoolhouses, because of its proved ability to resist the shocks of temblors. Safety to life has been assured by structural measures which make the most of recent experiences with earthquakes.

This is the second of a series of articles on different types of materials used in modern school construction. The first article discussing the use of terra cotta appeared in *The Nation's Schools* for December, 1934.



In the wall between the dining room and pantry are two serving windows with doors and two circles. The circles comprise three round shelves about 4 feet in diameter divided into quarter sections, each section being large enough to hold one of the trays used in clearing the tables.

Dining Room Service Wins

ESTABLISHED in 1893, George School is a coeducational, private preparatory school located in Bucks County, Pennsylvania. The resident student body consists of 300 boys and girls, with the girls in the slight majority. An additional forty pupils come in for the day. The boys live in two dormitories, Drayton and Orton; the girls live in the main building, and a small group in Sunnybank and Westwood.

The larger part of the dining room, which is in the main building, seats less than 300, and the smaller section, or the east dining room, seats about 100. The west dining room, a separate room which provides accommodations for part of the day pupils, seats twenty.

Eight persons are placed at each table, with forty-three tables for breakfast, fifty for lunch and forty-five for dinner. A faculty member is head of each table with a senior or junior boy or girl appointed as assistant table heads. Everyone comes into meals at the same time and the table seating of all of the pupils is changed each month. Every boy does his part in serving food at his own table. This, however, has nothing to do with the scholarships. It is a part of his duty the same as the care of his room.

In the fall of 1928, George School began its first venture with scholarships in the dining room and pantry. During the past year, a total of 131 pupils have recently had working scholarships, of which twenty-three were in the pantry and dining room.

Those desirous of taking advantage of this opportunity are asked to make application for work during the spring term for the next year, and a council of the deans, superintendent and the dietitian decides what pupils are eligible. In the fall when the academic schedules have been completed, the working hours are fitted in so as to get the best results, both for the pupil and the school.

There are twenty-seven and one-half working hours each day, nine for each meal and the extra half hour for the second noon working period. Four pupils, boys and girls, are required for the first periods, or shifts as the pupils call them, and five boys are required for the second periods. Most of the pupils work one hour a day; a few work two hours and some an extra hour every other day in addition to the one hour a day. A one-hour-a-day working scholarship earns \$60 for the year, or about 25 cents an hour.

A pupil working two hours a day has to have

An interesting form of student labor in food service is disclosed in this project started seven years ago in a private school. At no sacrifice to their school duties pupils receive scholarships for services performed in the dining room and pantry. The success of the plan is built upon soundly organized schedules, permitting each pupil participating to know his precise duties and hours of labor



Extra butter and milk are served from this second window.

Scholarships

By ELLA FELICIA ANDERSON

one regular hour each day in addition to the alternating shift.

Because we have an alternating academic schedule of week one and week two, with a ninety-minute class on Tuesday and Thursday of week one, and with the same class on Monday, Wednesday and Friday of week two, we find it better to alternate our shifts, especially the first noon shifts, with the schedule and place the additional hours at either breakfast or dinner on the other days.

This dining room and pantry work done by the pupils covers the setting and cleaning of tables, the delivery of all foods from the pantry to the tables and the service of cold foods to the pantry. Pupils have nothing to do with the preparation of food. This is done by fourteen colored employees, including two relief men, a storeroom man and two white bakers.

All schedules are posted on the pantry bulletin board. The hour of the shift is given at the extreme left. Next are the name of the pupil and the day he works the particular shift. A center row of numbers refers to the table setting chart, each number showing a marked division of tables for each pupil. Each set-up has a different number of tables, and each meal is shown on the chart by the

number within a colored enclosing line, as red for breakfast, green for lunch, and purple for dinner. A table clearing chart of five divisions is also posted in the pantry.

Breakfast shifts are from 6:20 a.m. to 7:20 and from 7:20 to 8:20. The second shift allows the boys to attend the 8:30 assembly. Noon shifts are from 11:15 a.m. to 12:15 p.m. and 12:15 to 1:15. Only pupils without second period classes are able to take the first noon shift; the second shift does not interfere with the third period class. The dinner shifts begin at 5 o'clock and are over at 7 o'clock, which gives the second shift part of the school social hour which is until 7:15 p.m. All first shift pupils are finished with their work in time to have dinner with the school. The second shift pupils eat half an hour before reporting.

A day's menu will indicate the type of meals served. Breakfast: orange juice, cracked wheat cereal, cherry preserves, muffins, toast, cocoa, coffee. Lunch: vegetable soup, saltines, apple, pineapple and fresh date salad, bread and butter, milk, gingerbread cup cake. Dinner: raw celery and olives, beef rib roast, browned potatoes, fresh asparagus, whole wheat bread and butter, milk, strawberry shortcake.

Several two and three-deck trucks are used for conveying the food from the kitchen to the dining room. In the wall between the dining room and the pantry are two serving windows with doors and two circles. The circles are, as the name implies, three round shelves, about four feet in diameter, divided into quarter sections. All shelves turn at the same time on a single center pole or rod. Were it not for the quarter divisions the circle might be called an enlarged "Lazy Susan." The quarter divisions act as a screen between the kitchen and the dining room. Each section of the circle is large enough to hold one of the large trays used for table clearing at dinner.

The first shifts for breakfast and lunch each have fifty-five minutes, and this is ample time for the entire setting of the tables, which average twelve for each person. The pupils are supplied with a three-deck truck on which have been placed all the cold dishes, glasses and part of the silver. Any extra silver needed is obtained from the silver cupboard in the dining room. The trucks are prepared by the colored pantry men after each meal when they have finished drying the silver and glasses. Each of the four trucks is covered with a large white cloth and placed in a separate room just off the kitchen and next to the pantry. The trucks are taken into the dining room by the

colored men just before the arrival of the pupils.

At breakfast, as soon as the truck is emptied, it is taken into the pantry and left there to be loaded with a tray of cups and one of saucers, which just fit into the top deck. On the second deck is placed the exact number of plates of butter needed by the pupil, and the truck is then taken into the dining room.

In the meantime, the pupil has put on his extra silver such as the serving spoons, sugar spoon for both brown and white sugar, and the butter knives. Cold cereal is put in bowls and put on the circle from the pantry side and removed by the pupil in the dining room on to his truck. The same is true for the preserves, and at luncheon and dinner for the bread, mayonnaise and sauces. The fruit for breakfast, salad for lunch, relishes for dinner, and all desserts (not frozen) are prepared for serving in the kitchen, put on trucks and brought into the dining room. The milk is put in two-quart pitchers twenty minutes before the meal hour and the pitchers placed on the tables. The water is put on twelve minutes before the opening of the dining room.

Hot cereal for breakfast is put in heated bowls and placed on the tables during the three minutes before the opening bell. The hot dishes at lunch time take on the average of four minutes for all



Pupils are beginning to set their tables. Eight persons are seated at each of the fifty tables.

of the tables. Only the hot vegetables are placed on the tables for dinner and the meat is called for at the first window, where it is served by the chef and his assistants.

Each boy is assigned a duty at the beginning of the term. Two pupils work at the first circle — at breakfast they serve the cold cereal, one boy on each side. Later in the meal the soiled fruit and cereal dishes are cleared to the first circle. One boy removes silver only, then turns the circle one quarter distance and the second boy removes all of the dishes. In this way the work progresses smoothly. A third boy empties all of the cereal and also waits on the dean's table in the dining room. When all of the dishes have been removed from the circle they are put into a truck and taken to the kitchen and put on the dishwasher shelves. At dinner only the dinner plates are cleared to this circle.

At the second circle one boy serves the coffee in pots and the extra preserves at breakfast time, at lunch time extra bread; at dinner bread and relish are both served and removed here. All frozen desserts are served from the second circle.

One pupil at breakfast time, and two pupils at lunch and dinner, work at the second window. Butter and milk are served from here at all meals. At dinner the butter chips, butter plates and silver in a small pan are cleared to this window.

From the first window, which opens from one end of the pantry into the center of the north wall of the dining room, the chef and his assistants serve the hot breads, toast, hot cocoa at breakfast, and at lunch and dinner the extra hot foods. All hot food is cleared to this window.

Plan Is a Success

Any boy wishing to remain in the dining room after the dismissal bell may do so provided his appetite requires it. After most of the people have left, the pupils are permitted to take their trucks into the dining room to clear their tables. At breakfast all soiled dishes of like kind are piled together on the truck from all of their tables. A second truck is used for the sugar bowls, tiles and any food that may have been left on the tables. One of the kitchen men collects all of the bread and butter at both breakfast and lunch.

Each pupil collects, in a clean pan, any leftover food and takes it to the pantry. He then clears the soiled dishes from his tables. The pupils who come in for the half hour collect all of the silver and then the glasses. They crumb the tables, fill any salt shakers needing it, and leave their tables in good order. The table cloths are changed at least three times a week by the shift boys. It takes on the average of thirty minutes to clear

Lunch Counter "Best Sellers"

Submitted by

LEORA ELLWOOD

Cafeteria Manager, Cheyenne High School,
Cheyenne, Wyo.

Rice and cheese croquettes with tomato sauce	10c
Lime fruit salad	
Buttered muffins	
Sausage patty	10c
Apple ring	
Escalloped potatoes	
Salmon loaf with green pea sauce	10c
Tomato aspic	
Shoestring potatoes	

the tables at breakfast and lunch and fifteen minutes at dinner. The dining room floor is cared for by the colored men after each meal.

The pupils have constant supervision both in the dining room and pantry. They are instructed in the habits of cleanliness in the handling of food, and are required to wear white coats and aprons while at work.

The success of our pupil help is indicated by the increase from a few assistants in the classrooms in the early years, to that of work credits granted to 131 boys and girls who received close to \$7,500 toward paying their tuitions this past year.

Menus Varied in Emergency Lunches

More than 90,000 children in hundreds of public and parochial schools throughout New York City were supplied free lunches daily by the New York City board of education during the school year just closed.

MONDAY

Vegetarian beans, whole wheat bread and butter sandwich, jam sandwich, apple.

Cream of pea soup, whole wheat bread and butter sandwich, jam sandwich, apple.

TUESDAY

Vegetable soup, whole wheat bread and butter sandwich, egg and celery sandwich, banana.

Cocoa, hard cooked egg, whole wheat bread and butter sandwich, banana.

WEDNESDAY

Cream of pea soup, whole wheat bread and butter sandwich, cream cheese and celery sandwich, apple.

Vegetarian beans, whole wheat bread and butter sandwich, jelly sandwich, apple.

THURSDAY

Carrots, peas and string beans, American cheese and celery sandwich, whole wheat bread and butter sandwich, banana.

Spaghetti and tomato sauce, whole wheat bread and butter sandwich, peanut butter sandwich, banana.

FRIDAY

Tomato and rice soup, whole wheat bread and butter sandwich, salmon with celery sandwich, apple.

Tomato and rice soup, whole wheat bread and butter sandwich, peanut butter sandwich, apple.

290,000 School Children Receive Free Lunches

MORE than 290,000 children in forty-five states and the District of Columbia received free school lunches including milk or free milk during the school year, 1933-34. This total, according to a survey made by the FERA, represents 7.5 per cent of the enrollment in the school systems from which these data were obtained. Three states, Alabama, Illinois and Michigan, did not report.

The proportion of all children receiving free school lunches varied considerably from state to state. In seventeen states, however, more than one-tenth of the total enrollment of the schools reporting free lunches were receiving such aid; in five states one-fifth of this total enrollment was served, and in three states about one-fourth. The highest percentage was discovered in a sparsely populated mountain state where 27 per cent of the children enrolled in schools reporting were being given free noon-day meals. On the other hand, in sixteen states less than 5 per cent of all enrolled were so helped. More than three-fourths (78 per cent) of the schools reporting served a luncheon which included milk in almost every case, 22 per cent serving free milk only.

Seven Cents a Day for Each Child

It cost about seven cents per child served per day to carry out the program. This average cost does not take into account lunches for which the food and cost of preparation were donated. It does include lunches for which the food was donated but for which the expense of preparation was a reported cost. It is probable that these donations do not appreciably decrease the average cost for the United States per school child served.

The survey indicates that the free school lunch program has been in operation in some systems for close to a decade. Of the 292,000 pupils receiving lunches, 98,950 (34 per cent) were attending schools that inaugurated a free lunch program prior to 1933, in some cases as early as 1925. A second group, including 81,896 pupils (28.5 per cent), were attending schools that started serving free lunches in 1933. Those remaining, 109,963 (37.5 per cent), were not given this help until 1934.

Much of the cost and labor required was formerly provided by private agencies but the peak of the program was reached before the middle of March, 1934, when CWA labor could be freely obtained. The fact that CWA workers displaced those provided by private agencies to a

great extent seems to have given rise to the feeling that, even when relief labor ceased to be available, the private agencies no longer had any responsibility for the work. For this reason there was a decline in the number of pupils served after March 15, 1934, when CWA labor and funds ceased to be available. A comparison of the survey returns with data provided by nutritionists on relief staffs indicated that the decrease was from one-third to one-fourth of the peak reached in the month of February.

Teacher Sacrifice Frequent

Comments made by school superintendents indicate that many private agencies formerly concerned in this program are now unable to continue offering money, food and services because of depletion of resources. To meet the need it has been the practice in many places to divert miscellaneous school funds to the support of the luncheon system. A frequent source of funds mentioned was contributions from teachers, who not only gave part of their salaries to supply food but also gave freely of their time to prepare and serve the foods in schools where there was an extreme need that not otherwise would be met.

Evidence at hand indicates that a high percentage of the school children in certain communities have always needed this aid and that this group undoubtedly makes up a fair share of the total load at the present time. What proportion of the current load is in constant need and what proportion is merely temporarily in need, because of the depression, is not clear.

It should be pointed out, according to Mary A. Mason, adviser on food requirements, FERA, that the service of free lunches to school children from needy families was on a different basis during the school year 1934-35 than that which prevailed at the time the study was made. The preceding year special earmarked federal funds were available to the states that wished to put on school lunch programs, and labor was obtainable from Civil Works Service funds. During the year just closed there were no earmarked funds for school lunches. The cost of school lunches, however, could be paid from the general relief grant to the state administrations.

Rating sheets for more than 500 school buildings show the average cost due to fire hazard penalties is \$66 a year over the base insurance rate. Some hazards cannot be eliminated; many can.



Acme

Sources of Penalties in Fire Insurance

By N. E. VILES

THE cost of fire insurance protection for school buildings is determined by the type of policies written, the coverage carried, and the rate on a particular building. To a base rate, determined primarily by the type of building and the availability of fire fighting facilities, penalties may be added for fire hazards found in the building, and certain credits may be deducted for fire-resistive or protective features. The rate thus obtained, usually called the published rate, is used as a basis for determining the premiums to be paid.

A tabulation of the rating sheets for more than 500 school buildings selected at random shows that the average published rate on these buildings is about one and one-half times the average base rate. The difference between the base and the published rate, which represents the excess of the penalties over the credits granted on these buildings, is

costing an average of \$66 a year on each building in excess premiums.

Penalties are usually divided into three classes: structural, occupancy and aftercharges. Structural penalties are levied for deficiencies in construction that might create fire hazards, and the most common are for large areas not cut off by fire walls; for deficient or defective walls; for wood shingle roofs; for skylights and dormer windows, and for openings leading from one floor to another.

Occupancy penalties are levied for fire hazards which may in some way be connected with the type of work done in the building. The more common penalties are for fire hazards created by defective or poorly protected heating units and ventilating ducts, or by wood and metal work shops, laboratories and home economic departments.

Aftercharge penalties are levied for specific hazards not cared for under structural and occupancy charges. Such hazards as defective wiring, unprotected heat units near combustible materials, broken plaster or the lack of proper storage for combustible materials, draw aftercharge penalties.

Fire hazards created by large areas not cut off by fire resistive walls that might check the progress of fire, defective or deficient exterior walls, and floor openings are not easily eliminated from buildings now in use. The penalties for these hazards can to a large extent be avoided when a new building is erected. About 84 per cent of the buildings checked draw area penalties and the average penalty is 4.4 cents for each \$100 of insurance carried. Cracked walls, the lack of parapet walls and hollow tile backing are responsible for many of the wall penalties levied on about one-third of the buildings. The average penalty is ten cents. Sixty-two per cent of the buildings are penalized for stair and other floor openings with an average penalty of 3.9 cents.

Penalties levied for hazards created by wood shingle roofs or wood superstructures above fire-resistive ceilings, for skylights and exterior attachments, and for combustible ceilings may in many instances be eliminated without excessive cost. About one-fifth of the 500 buildings draw roof penalties. The average penalty is 10 cents. Dormer windows, louvered roof ventilators, skylights and towers are penalized in about 14 per cent of the buildings. The average penalty is 3 cents.

Heating System Hazards Heavily Penalized

There is not a clear distinction between some of the occupancy and structural penalties. This is particularly true of the penalties levied on heating and ventilating systems. Many of the penalties now levied could be avoided by changes in structural features which would eliminate all combustible material near ventilating ducts or heat units. The presence of combustible material near the furnace or the smoke breeching is responsible for many penalties. In many cases wood floors, often with open joists covered with oil soaked floors, are within a few inches of the top of the furnace. Other penalties may be levied for holes in the smoke breeching, kindling piled near the furnace, or for hot air furnaces with ducts leading up through combustible partitions. Thirty per cent of the buildings are penalized for hazards connected with the heating system. The average penalty is 11 cents.

The lack of fireproof ventilating ducts brings many penalties. In some buildings penalties are levied because fireproof ducts empty into attics of combustible construction. In other cases thin metal

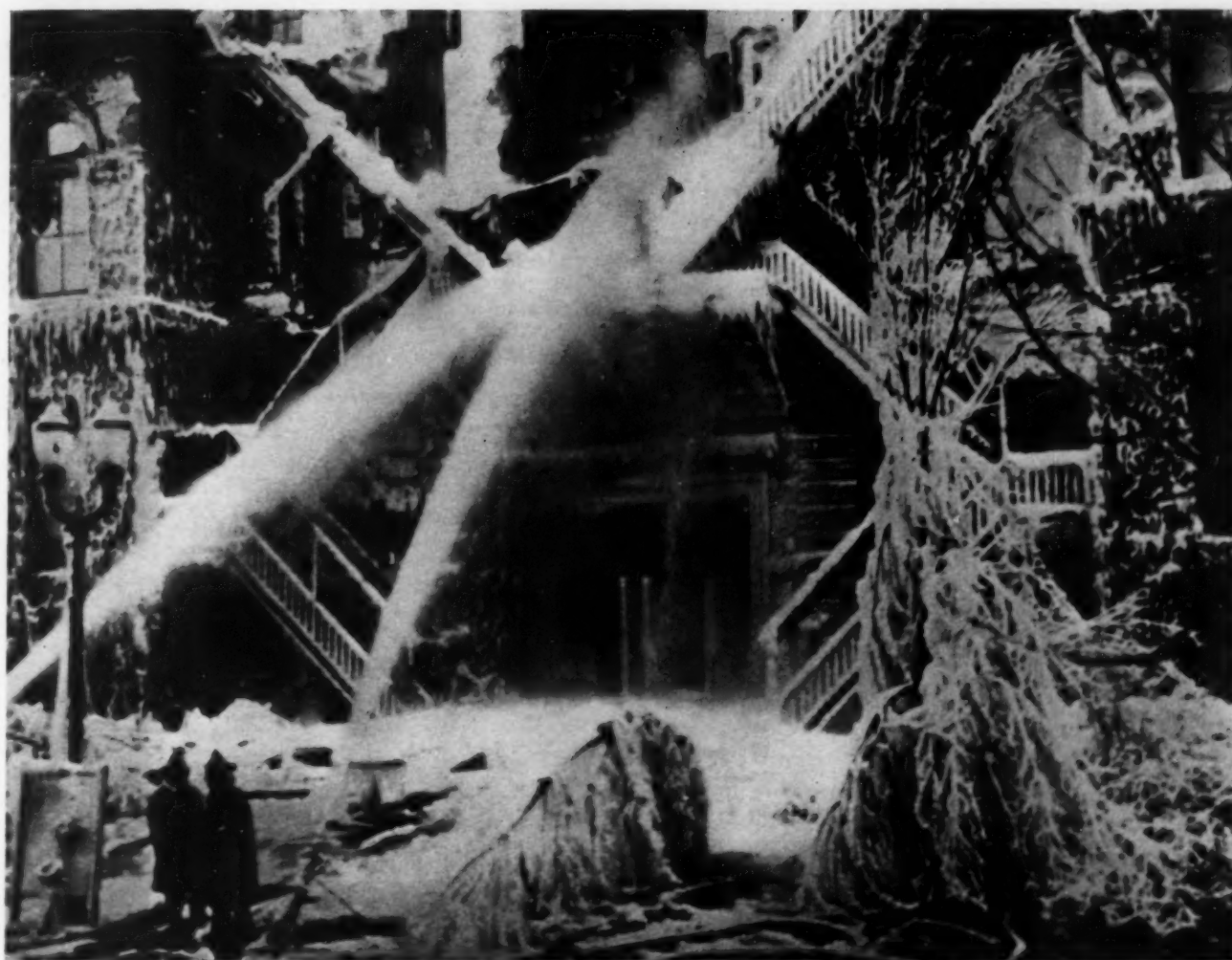
ducts pass up through combustible walls, and in a few cases unprotected openings in wood lath and plaster walls are used for ventilating purposes. About one-third of the buildings seem to draw penalties for ventilating ducts and the average penalty is 10 cents. It is not difficult to prevent these fire hazards in planning new buildings and in many cases the hazards may be removed from buildings now in use. In a number of old buildings ventilating ducts of combustible construction have been closed and a system of corridor ventilation, for which there is no penalty, installed.

Eliminating Picture Booth Hazards

The auditorium and assembly room contribute to a number of the penalties levied on school buildings. The more common ones are those levied on the boxed platform stages equipped with combustible scenery, and on the dressing rooms which often become storerooms for stage equipment and rubbish. The penalties for these two items are not easily eliminated. One other penalty levied on auditorium units is that for picture booths and machines. While this penalty is not common it is usually heavy. In one building the cost in added premiums for this one penalty was \$250 per year. Rating bureaus will supply illustrations and information showing how to reduce or eliminate the fire hazards connected with picture booths.

The type of work done in chemical laboratories, in home economics departments and in wood and metal work shops is responsible for a number of fire hazards. In fact, there are so many possible hazards in the rooms used for these units of instruction that a fixed rate penalty is usually levied. Specific penalties are then levied for specific risks. The penalty for the home economics unit is applicable to any room where cooking is done. That for the chemical laboratory is not usually applied for small laboratories. There does not seem to be any feasible plan for removing the penalties in these two units, but proper attention to fire prevention will eliminate practically all the penalties for special fire risks in these rooms.

The varied activities carried on in the wood and metal working shops may be responsible for a number of fire hazards. The use of blow torches and of glue pots with a heating unit, the presence and use of paints and varnishes, and the use of sanding machines are common causes of penalties in wood-working shops. The use of power machines is also a source of penalties. In a number of shops the use of open type motors that might throw off sparks to fall into shavings or other combustible material creates a fire hazard that may bring a rather heavy penalty. The presence of forges and gasoline engines and the storage of gasoline in unapproved



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Fire hazards created by large areas not cut off by fire resistive walls that might check the progress of fire, defective or deficient exterior walls, and floor openings are not easily eliminated from buildings now in use.

containers rarely fail to bring heavy penalties. Twenty-one per cent of the buildings checked drew shop penalties, the average being 15 cents.

Since the nature of the work prevents the elimination of many of these penalties, a number of schools have found it profitable to move the shop work to separate shop buildings where the insurable value is small. In new buildings it has been found advisable to cut off the shop unit by fire-proof walls, floors, ceilings and fire doors.

Certain penalties, usually termed aftercharges, may be levied on fire hazards not covered under other penalties. The amount is determined by the nature of the hazard. Most of the fire hazards penalized under aftercharges may be attributed to poor maintenance and housekeeping methods. In some cases an aftercharge may be added for a particular hazard, even though this hazard drew a penalty under another heading. For instance, wood shingle roofs may draw structural penalties, but if the shingles are old and curling an added penalty may be levied as an aftercharge. Practically all the aftercharge penalties can easily be eliminated.

Perhaps the most common aftercharge penalty is that for defective wiring. Overloading, overfusing, bridging a fuse gap, poorly insulated switches, or wires in contact with metal are common sources of this penalty. Fifty-three per cent of the buildings checked drew penalties for defective wiring. The average penalty was 7.7 cents. In addition to the regular penalties for defective wiring, there are others for lack of pilot lights on electric heating units and electric irons. In a few buildings this penalty is costing \$50 or more a year, yet the light could be installed for less than \$10.

Aftercharge penalties may be levied for the lack of proper protection between hot plates, ovens and stoves, and wood or other combustible material that may be near them, for broken plaster, for the lack of waste cans or for the accumulation of rubbish.

The elimination of fire hazards in these buildings would effect a substantial saving in insurance premiums each year.

(Note: The penalties listed here were rated under the Dean Analytic Rating System. In each case where the average penalty is given it is the penalty for each \$100 of fire insurance carried.)

NEWS IN REVIEW

New York Experiments With Elimination of Early Grade Lines, New Report Cards, Cutting Class Size

A radical departure will be tried out experimentally in a number of the public schools of New York City beginning in September when kindergarten and the first three grades will become a single unit, all grade lines being eliminated.

Supt. Harold G. Campbell, in announcing this and other changes, declares that it will defer the challenge of promotion until the end of the third year. With no half yearly promotion day, which often means "left-back" day for some children, the weaker pupils will have more time and special attention and thus may soon be abreast of their classmates.

A new report card will also be put in use. Instead of "A," "B," "C" or "D" pupils will be rated monthly as satisfactory or unsatisfactory "in view of individual ability." If the child is capable of doing very good work, but does only fairly good work, the mark will be unsatisfactory.

Instead of rating pupils simply as to proficiency and conduct in general, the new card will say specifically whether children work well with others, play well with others, respect authority, obey courteously, complete the tasks they begin, show carefulness, are reliable in word and act and whether they make good use of their time.

The activity program, which has been carried on in thirteen schools recommended by the New York Principals' Association, will be extended in the coming year to fifty schools, Superintendent Campbell declares. Under this program the school makes organized use of all that its neighborhood has to offer, thus motivating the study of subjects that previously have seemed unenticing.

Provision of new reading material more closely related to the city child's life and immediate environment will mark another departure.

Another change proposed for the new term relates to cutting class sizes. On the basis of a citywide survey, seventy schools have been selected where the median I. Q. of pupils is low, the rate of retardation high and where truancy and delinquency present serious problems.

The size of opportunity classes and other classes for slow children in these schools will be reduced from 38.5 to 28, in order to make possible more individual attention and remedial teaching. In classes for normal progress children a reduction in class size will be made first to 38.1 and then to 37.5. The new plan thus makes the largest reductions in schools and classes presenting the most serious problems.

Administrators Confer at Peabody College

More than 1,000 delegates from thirty-six states attended the sixth annual School Administrators Conference, sponsored by the department of school administration at George Peabody College for Teachers, June 24 to 26. Dr. Dennis H. Cooke and Dr. Ray L. Hamon directed the conference.

The general theme was "Current Problems in School Finance, Public Relations, the Teaching Staff, Curriculum, and the School Plant."

Among the speakers were the following: Dr. George D. Strayer, Jr., Peabody College; J. A. Keller, state superintendent of Alabama; Supt. Roscoe Pulliam, Harrisburg, Ill.; Timon Covert, U. S. Office of Education; W. F. Bond, state superintendent of Mississippi; Supt. L. P. Hollis, Greenville, S. C.; Supt. Guy B. Phillips, Greensboro, N. C.; Dr. T. D. Martin, National Education Association; H. R. Hunter, assistant super-

intendent of the Atlanta schools; Supt. W. C. Griggs of Mobile, Ala.; Dr. W. T. Rowland, director of research, Louisville, Ky.; Dr. Doak S. Campbell, Peabody College.

Supt. A. C. Flora of Columbia, S. C.; Supt. R. C. Hall, Little Rock, Ark.; Dr. Joseph Roemer, Peabody College; Supt. R. W. Carver, Hickory, N. C.; Supt. William R. Davies, Superior, Wis.; Clyde Erwin, state superintendent of North Carolina; W. F. Credle, state department of education, Raleigh, N. C.; W. G. Eckles, state department of education, Jackson, Miss.; Dr. N. E. Viles, state department of education, Jefferson City, Mo.; President Bruce R. Payne, Peabody College; Dr. S. C. Garrison, Peabody College, and Dr. W. R. McConnell, Miami University, Oxford, Ohio.

As an outgrowth of an address by Superintendent Pulliam, the conference went on record as favoring and requesting a larger degree of participation by the federal government in the support of public education.

Dental Hygiene Plan in Iowa Reaches 175,000

Better teeth — and therefore better health — for thousands of Iowa school children have resulted from the operation of the Iowa plan for dental hygiene during the last seven years.

An educational rather than a clinical program is stressed by the bureau of dental hygiene of the University of Iowa under the direction of Dr. Charles L. Drain.

Capitalizing upon the child's natural spirit of rivalry and pride and fanning interest by such devices as posters, playlets and pictures, the plan sets forth three major aims. In modern order of importance these are diet, regular dental inspections, and cleaning of teeth.

About eighty of the state's ninety-nine counties annually enroll for the plan. Some 5,000 rural schools as well as those in 400 cities and towns participate.

Some 175,000 children annually come under the influence of the plan, and about 75,000 of them attain the dental honor roll.

Y. C. L. Made National in Scope

With 90,000 elementary school children as members, the Young Citizens' League organized in South Dakota in 1912 decided at a recent tri-state convention held in Aberdeen to become national in scope. Rural schools in South Dakota are organized into chapters almost 100 per cent, it is said. The movement has spread to North Dakota, where there are 2,000 chapters, and to Minnesota. There are scattered chapters in Montana, Wyoming, Kansas, California, Mexico, Hawaii and Puerto Rico. Prof. M. M. Guhin of Northern State Teachers' College founded the movement.

Library Medal to Bulgarian Story

The John Newbery Medal, awarded annually "for the most distinguished contribution to American literature for children," was presented this year to Monica Shannon for her novel, "Dobry." The selection was announced at the annual convention of the American Library Association.

Book Week Plans Being Made

"Reading for Fun" is to be the theme of the 1935 Book Week, November 17 to 23. Chief emphasis will be on the broad field of imaginative literature, the classics and modern tales of character, of far places, of humor and fantasy. A new poster and leaflet of suggestions for Book Week exhibits and programs will be ready in September, the National Association of Book Publishers announces.

Girls' School Moves to White Mountains' Site

St. Mary's School of the Episcopal Diocese of New Hampshire, which has been located in Concord, N. H., for more than fifty years, will be moved to Sugar Hill near the well known Peckitt's skiing center at Franconia, N. H.

A large house designed for all-year use has been obtained by the school. Officials decided that by moving from the city a more healthful climate would be provided for the pupils.

St. Mary's is a girls' school, giving a six-year course in college preparatory work and in domestic science.

Dr. Elliott Michigan School Head

Dr. Eugene B. Elliott, assistant superintendent of public instruction for Michigan, was appointed state superintendent for a two-year term by Governor Fitzgerald to fill the vacancy created by the death of Dr. M. R. Keyworth a week before taking office. The democratic incumbent, Dr. Paul F. Voelker, refused to yield the office to Doctor Elliott on July 1, claiming that no vacancy was created because Doctor Keyworth had not technically qualified for office prior to his accidental death. The records show that Doctor Keyworth took the oath the Thursday before he was killed. The attorney general has brought quo warranto proceedings in behalf of Doctor Elliott and this friendly suit over a technical point of law will probably be argued before the supreme court during August.

Home Economics Association Considers School Problems

School feeding problems and the teaching of home economics were not overlooked in the twenty-eighth annual meeting of the American Home Economics Association held in Chicago, June 23-28.

Three hundred and nine semester hours are offered Los Angeles secondary school pupils in the subject of home economics, said Dr. H. B. Alberty, Ohio State University, in his paper on the trend toward curriculum integration in secondary education. "If curriculum integration were introduced into this system," he declared, "home economics would disappear as a special field."

Prof. Arthur B. Mays, University of Illinois, addressed the group on the new significance of practical arts.

"The practical arts are official representatives in the school of what is really going on in the world," Professor Mays asserted. "At one time the practical arts were ornamental, now they are fundamental, and the former fundamentals are ornamental. The

practical arts will play a major part in integration, for the social sciences are not vitally interesting to junior high school pupils, while the practical arts are."

Home economists must reevaluate their program, said Ivol Spafford, Columbus, Ohio, to include instruction to all families in the science of home-making. The weaknesses of the field as she sees them are that much they have to offer has never been evaluated, the courses are offered to few, and then mostly to pupils on the secondary level, and that home economics, as it now stands, is not significant in integrated levels.

The organization of the Fort Worth public school lunchroom system was outlined by Bena Hoskins, director. The system is self-supporting, and pays all salaries with the exception of that of the business manager.

Temple Will Establish New School of Fine Arts

As a result of receiving the \$1,000,000 estate of Mr. and Mrs. George F. Tyler in Elkins Park, Temple University has announced plans for a fine arts college. Activities of this department will be centered in a brick mansion with forty-five rooms and will be devoted to instructing students in all mediums of artistic expression, such as painting, modeling, sketching, stone and wood carving, metal work, music and the dance, it is announced.

Schools Dip Into Federal Millions in Building Projects; PWA Gets Flood of New Applications

While the usual midsummer lull settles over the classrooms of America and summer schools enter their second and smaller terms, building plans of unprecedented proportions are keeping the school world in a state of feverish activity.

If there is a school system in the country that is not planning or actually constructing a new plant or improving the old, it is hard to believe, after a survey of the building reports that reach The NATION'S SCHOOLS offices each day.

The PWA's new policy of making outright grants of 45 per cent for public construction projects and of lending the remainder on self-liquidating projects has brought floods of new applications from school bodies. Some construction is also being done without the aid of federal loans.

Ed P. Williams, school business manager of Fort Worth, Tex., reports that although at least 60 per cent of the buildings in the twenty-six-unit building program in that city will be under construction by September 1,

The new division will be known as the Stella Elkins Tyler Fine Arts College of Temple University and will be under the directorship of Boris Blai, sculptor and member of the university faculty. The school will be coeducational and will train both artists and art teachers.

Vermont College Plans Huge Building Program

Middlebury College, Middlebury, Vt., has announced a plan for a \$3,500,000 women's college, thus completely segregating men and women students.

The first dormitory unit is being started this summer at a cost of \$350,000, President Paul D. Moody announces.

Thirty-five years ago the college adopted a policy of separating the men's and women's colleges, but not until 1931 was it possible for women to matriculate at a separate college. The women's unit is now known as the Women's College at Middlebury.

Plans call for four large dormitories, a chapel, library, gymnasium, three recitation and lecture halls, an art museum, music hall and dean's home. The site of the new college is directly north of the men's campus.

Buildings will be erected as funds become available. Sale to the federal government of 30,000 acres of forest land willed to the college in 1915 will provide some of the money.

only about 35 per cent of the PWA loan and grant of \$4,227,000 will have been spent by that time.

The Pittsburgh board of education is spending \$1,000,000 in construction and repair jobs this summer.

Supt. William W. Drummey of the department of school buildings, Boston, will advertise for bids within the next few weeks on two new schools that will cost \$1,100,000. Improvements are being made on many old school buildings, insulation against heat loss being a major improvement.

State Supt. Clyde A. Erwin of North Carolina expects schools of that state to ask for from \$12,000,000 to \$15,000,000 for building improvements.

New York City has tentatively planned to ask the government for \$10,700,000 for new schools. This month work will begin on two high schools for that school system, with a combined cost of \$6,000,000.

Chicago has new construction and repair projects approximating in cost \$6,000,000 ready for submission to the director of federal works for Illinois.

REGIONAL NEWS...

Eastern States

CONNECTICUT

Hartford. — A long term building program including construction with federal funds of two new junior high schools, four elementary school buildings, and an addition to the Hartford High School to provide for junior high school pupils has been proposed. The program, approved by the board of education, has been sent to the municipal FERA committee for preparation of plans and estimates of costs. . . . The board of education has abolished mid-year promotions. After February, 1936, promotion and graduation will take place only in June.

Trumbull. — The Trumbull Center School will have a four-room addition to be constructed with PWA funds.

NEW JERSEY

Bloomington. — Government funds will be sought through loan and grant for the construction of eight classrooms and an auditorium replacing the fifty-year-old frame wing at the local school.

Newark. — Over 6,000 high school pupils, teachers and parents attended a meeting in the City Schools Stadium in celebration of the 300th anniversary of the establishment of high school education in the United States. U. S. Senator A. Harry Moore was the chief speaker.

New Brunswick. — Voters will decide whether or not they want the \$156,000 addition to the Franklin Junior High School proposed by the Highland Park board of education. If approved by voters and PWA authorities, the addition will complete the borough's high school system.

Ramsey. — A special election on June 24 determined construction and site of a \$600,000 high school building, plans for which were drawn by Fanning and Shaw, architects of Paterson. A PWA grant and loan will be sought.

Teaneck. — Tentative contracts have been awarded by the board of education of Teaneck Township for a junior high school addition. The available appropriation for the work is \$635,000. The addition will house between 1,200 and 1,400 pupils and will include a complete radio and public address system. Hacker & Hacker are the architects.

NEW YORK

Lynbrook. — This village is considering the erection of a \$500,000 high school to accommodate 1,000 pupils. The present building, constructed to house 600 pupils, already has to accommodate 750.

Mount Vernon. — The board of educa-

tion will submit to the state PWA director plans for the expenditure of close to \$1,000,000 for the construction of two new grade schools. They will replace the Nathan Hale and the Hamilton schools. The plan calls for the elimination of Sophie J. Mee School, the oldest educational building in the town.

New York City. — Outright grants of \$2,706,544 toward the construction of Andrew Jackson High School in St. Albans and Franklin K. Lane High School in Woodhaven have been approved by President Roosevelt's Work Review Board. Queens civic associations and parent-teacher groups have waged a long fight to obtain PWA funds for the two schools. The Andrew Jackson School will cost about \$2,500,000 and will relieve serious congestion at Jamaica High School. The Franklin K. Lane High School, estimated to cost \$3,500,000, will serve the southwest section of Queens and will relieve congestion in several schools. An effort will be made to complete the two buildings within a year; two shifts of workers will probably be used on the projects. . . . Approximately 6,000 students are enrolled at the summer school of New York University. The school of education is the largest unit and Dean John W. Withers has a staff of 132 teachers to present the 275 courses offered.

Nyack. — A Rockland County Center for Commercial Education will be established here next fall by New York University with Robert F. Valentine of Monsey, N. Y., as resident director.

Ogdensburg. — Randall & Vedder, Syracuse architects, have been selected to draw plans and call for bids from contractors for a new junior high school and elementary school, at an estimated cost of \$400,000. The building will accommodate 1,200 pupils. The same architects will also draw plans for the George Hall Trade School.

Olean. — Pupils had three days' less schooling this year at the Paradise Valley School when just before the term ended the 57-year-old school building was destroyed by fire. Negotiations were under way at the time for a PWA loan for a new structure.

Monticello. — The new \$400,000 high school will be ready for occupancy in February, it is believed. The two steam boilers which will heat the new building and the old school next door have been installed.

Rochester. — A new \$2,000,000 Edison Technical High School is being given serious consideration by the city council. The present Edison Tech is housed in a rented factory building.

Troy. — The board of education will apply to the PWA for funds for a new high school building, to cost from \$1,200,000 to \$1,500,000. Members of the faculty of the department of architecture, Rensselaer Polytechnic Institute, will help prepare the preliminary plans.

Utica. — A loan and grant of \$1,295,000 for school construction was reduced to \$945,000 because the city sold, in the private investment market, \$350,000 worth of bonds that the PWA had agreed to purchase, according to the *Albany Times-Union*.

MAINE

Calais. — Formal application has been made for PWA funds amounting to \$220,000 for a new junior-senior high school building. Bunker & Savage, architects of Augusta, have drawn the plans.

Waterville. — An anonymous gift of \$25,000 has been made to Colby College, the income to be used for library purposes.

MASSACHUSETTS

Newburyport. — A twenty-year campaign for better high school facilities advanced a step recently when the city council authorized the city to borrow \$275,000 for the purpose of constructing and furnishing a new structure at the Mount Rural site. A PWA grant will be sought. Edwin S. Dodge of Boston, the architect, and Charles R. Thibadeau, superintendent of schools, explained the plans to the council members.

Southbridge. — The school committee has decided to seek funds for an elementary school of sixteen classrooms rather than the two eight-room neighborhood schools originally contemplated. Fuller L. Austin is superintendent of schools.

Swampscott. — Town meeting members have authorized the town treasurer to borrow \$325,000 for use in remodeling, enlarging and equipping the present high school. A proposal to construct a new high school building in Phillips Park was turned down.

PENNSYLVANIA

Ambridge. — A year-round school plan which has been in use for three years in an effort to lessen congestion in the junior high school has been insufficient, Supt. Joseph R. Miller declares. The pupils do not object to going to school in the summer so much as they dislike midwinter vacations. The board of education is considering an application for a PWA loan and grant of \$350,000 to construct an addition to the junior high school building.

Bethlehem. — With the hope that a PWA loan will be secured to finance the project, the school board of Fountain Hill has approved preliminary plans for a \$146,000 high school building. The plans were drawn by Lovelace and Spillman, architects of Bethlehem, and have been forwarded to the state capital for approval,

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in accordance with the school code. *Lancaster.*—This city's proposed "million dollar" high school moved a step nearer reality recently when the school board applied to the federal government for a grant of \$450,000, covering 45 per cent of the cost of the school. School board members are in favor of floating their own bond issue for the remainder of the fund. This plan, they believe, would be more economical than borrowing from the government at 4 per cent. . . . The Mulberry Street building opposite the Boys' High School will be closed, and the opportunity school now housed there will be transferred to the Ann Street School. At the latter building better play facilities will be provided. *St. Clair.*—A twenty-six-classroom building is being contemplated, from sketches submitted by Muhlenburg Bros., Reading architects. The approximate cost of the building will be \$230,000.

Swarthmore.—The final payment in the total sum of \$900,000 given by Fred M. Kirby for the endowment of the Dr. Edward Martin department of biology at Swarthmore College has been made, making possible the construction of a new building to house the enlarged department. The pledge of \$900,000 was made anonymously in 1929 and it was not until last December that the donor's name became known.

Southern States

GEORGIA

Decatur.—Agnes Scott College will begin in the early fall construction on a new \$200,000 library, Dr. J. R. McCain, the president, announces. The book collection of this college is said to be one of the most complete and modern of any Southern college.

KENTUCKY

Lexington.—An extension to the foundry of the college of engineering, University of Kentucky, is being constructed this summer as a KERA project. Materials are provided by the university and labor by the relief authority. The foundry extension will enable the college of engineering to bring together the ferrous and non-ferrous foundries. At the present time the ferrous foundry occupies its own building while the nonferrous foundry occupies space in the mining engineering laboratory.

Madisonville.—Plans are being prepared by Henry E. Boyle and Company, architects of Evansville, Ind., for a new high school for Madisonville to cost \$125,000. Besides thirteen classrooms the building will house the domestic science and industrial arts departments, a cafeteria, auditorium, library and study hall.

LOUISIANA

Baton Rouge.—Within five months following excavation work, the new women's dormitory at Louisiana State

University is expected to be ready for occupancy. The arts and sciences building will be completed by August 1, it is believed, and the French house will also be ready for the fall term.

Crowley.—The Rev. Father George Mollo announces that work on the first unit of St. Michael's school building will begin this month. Romanesque architecture, showing the Byzantine influence, will be used, so that the school will conform with St. Michael's Church. The first unit will have ten classrooms, but eventually twenty-six classrooms are contemplated, as well as a science laboratory, library, gymnasium, auditorium with stage, projection room and playground facilities on the roof. The architect is Owen J. Southwell of New Iberia.

NORTH CAROLINA

Charlotte.—The city school board has requested of the county board a PWA construction program totaling \$350,000. The replacement of a seventy-seven-year-old building, some additions to other buildings and provision for numerous playgrounds and their equipment are included in the early plans.

Henderson.—Work started in late June on the new high school building, a project long delayed. Construction is also under way on the new North Henderson school and the four-room addition at South Henderson.

Marion.—Architect Lindsey M. Guder, Asheville, is at work on preliminary plans for school projects amounting to \$100,000 for McDowell County. They include auditoriums for several schools, additions and improved sanitary facilities, for all of which PWA funds will be sought.

Raleigh.—Clyde A. Erwin, state superintendent of public instruction, says schools of North Carolina will probably ask for from \$12,000,000 to \$15,000,000 from PWA funds for renovations, additions, new construction and sanitation facilities. W. F. Credle, director of schoolhouse planning, is spending his full time conferring with superintendents in regard to proposed applications and needs. These are to be filed with the state planning board.

SOUTH CAROLINA

Charleston.—Expansions and improvements in the city public school system through the issuance of from \$148,000 to \$162,000 in bonds have been proposed to the Charleston County legislative delegation by the city board of school commissioners. The Shaw School, for example, is of frame construction with wooden stairs and last year accommodated 1,000 pupils. The structure has been a source of anxiety to the board and the fire department for some years.

Columbia.—The first conference on South Carolina Public Affairs was held at the university June 26 and 27. *Kingstree.*—The contract has been awarded for the new high school

building for the Tomlinson School for Negroes. The four-room structure will contain classrooms and a manual training shop. W. M. Anderson has been reelected as principal of the school, which he has served for the last eleven years.

TENNESSEE

Nashville.—The contract has been awarded for building a new elementary school and for constructing additions to two others.

TEXAS

Fort Worth.—Five schools have recently been selected for complete rehabilitation at a cost of \$71,725. . . . Petitions have been received by the board of education asking the retention of Principals R. L. Paschal and Ernest Parker of Central High School and Jennings Avenue Junior High School, respectively. These two men were retired automatically, having reached the age of sixty-five. Mr. Paschal has been named director of junior and senior high school libraries. . . . Among the new schools being built in Fort Worth is the Morningside, which will cost \$116,295. Included are nine classrooms, kindergarten room, library, health unit, administration unit, auditorium and cafeteria.

Houston.—The board of education will apply to the federal government for \$3,671,000 for the erection of two senior high schools and numerous other permanent improvements to the school system. An outright gift of \$1,651,950 will be sought, and voters will be asked to approve a bond issue for the rest to secure a government loan.

Laredo.—Ground was broken on July 4 for the new high school building and athletic field to cost \$347,047. PWA funds, through loan and grant, will finance the project. W. P. Galligan is superintendent of schools, and Giesecke & Harris, the architects.

San Antonio.—The architects, Adams & Adams, have been instructed to proceed with working drawings for the proposed North Side Junior School, to be erected at a cost of \$200,000. This building is one project of the board of education's \$1,390,000 building program financed by PWA grant and sale of school bonds.

WEST VIRGINIA

Huntington.—A school improvement project covering Cabell County is being contemplated involving the sum of \$1,240,169, according to O. C. Nutter, county superintendent.

Wayne.—A Wayne County program for school construction under work relief totaling \$850,000 has been drawn up and submitted to state and federal authorities, according to Frank Arnett, assistant superintendent of county schools. Plans call for a high school for the Westmoreland district, another for Ceredo and Kenova, and additions and repairs to many other buildings.

IN EGYPT



Courtesy of Architectural Forum

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Western States

CALIFORNIA

Alhambra.—Including construction of a new Ynez School auditorium, the board of education has approved cost estimates totaling \$297,306 for school buildings. Immediate preparation of specifications have been ordered as required for application to the federal government for PWA aid. Superintendent of Schools Bettinger submitted the estimates, drawn in consultation with John Walker Smart, school architect, and George Yelland, secretary of the board.

Sacramento.—Formal application for PWA funds amounting to approximately \$700,000 for a new senior high school has been authorized by the board of education. Starks & Flanders will draw the plans. The site has not been selected, according to Supt. Charles C. Hughes.

Stockton.—A combined gymnasium and auditorium and another building to care for shop and agricultural activities are planned as additions to the Ripon High School plant, Principal W. A. Stauffer announces. H. C. Weeks of San Francisco has drawn the plans for the buildings, which will correspond in architectural style to the present building.

NEVADA

Las Vegas.—The board of education has decided to replace the grammar school building destroyed by fire in 1934. The new building will do away with the tent classrooms that have been in use since the fire. PWA funds will be sought.

OREGON

Corvallis.—Fifty prospective nursery school teachers in the emergency education program in Oregon are enrolled for an intensive five weeks' training course at the state college, under the supervision of Mrs. Sarah V. Case, supervisor of nursery schools and parent education in the state department of education.

Eugene.—The Oregon State Board of Education recently announced the appointment of a state Americanization commission composed of the following persons: C. A. Rice, superintendent of schools, Portland; Thomas R. Mahoney, chairman of the state committee on Americanism of the American Legion; John M. Jandrall, principal of Seaside Union High School; Mrs. Mabel A. McInturff, club leader, Marshfield, and Percy Murray, chairman of the Union High School board, Klamath Falls. Roben J. Maaske of the state department of education will serve as state director of Americanization.

Middle Western States

ILLINOIS

Chenoa.—Construction of a new community high school building in this district, at an estimated cost of \$100,-

000, depends upon the success of the board's application for a federal grant. The high school district comprises the city of Chenoa and seven grade school districts. The district collects about \$1,500 a year in tuition for pupils from nonhigh school districts.

Chicago.—A bequest of the late Theodore Max Troy of Jacksonville, Fla., to the Julius Rosenwald Fund will add \$20,000 to the fund's appropriation for improving schools in the South. In announcing the gift, Edwin R. Embree, president of the Rosenwald Fund, remarked that it was odd for a private foundation to receive a gift from an outsider. The legacy was a surprise as Mr. Troy, who died May 1, did not communicate with anyone connected with the fund. . . . More than 200 switches are required in the central control cabinet of the radio, speech and music system that has been installed at Lane Technical High School. The system connects the head office with 180 classrooms of a school of 8,700 pupils, two and one-half miles of corridors and a site covering thirty acres. . . . Goudy, Schiller and Newberry elementary schools are to be rebuilt and four new structures are contemplated for the north side.

Jacksonville.—A PWA project involving \$250,000 is now under way at the Illinois School for the Deaf. It will provide a new primary unit, and a boiler house and chimney. Seven hundred pupils are enrolled in this special school, the physical plant of which is antiquated, according to A. L. Bowen, director of the state department of public welfare.

Springfield.—A tentative program looking toward installation of six-year high schools in four sections of the city has been presented to the board of education by Supt. Frank T. Vasey. Exclusive of Springfield High School changes, estimates of costs run from \$290,000 to \$547,000.

Wheaton.—A combination gymnasium and auditorium will be built and extensive remodeling will take place at the Wheaton Junior High School, in one of Chicago's western suburbs. E. Norman Brydges, architect of Elmhurst, Ill., has drawn the plans.

INDIANA

South Bend.—Frank E. Allen, superintendent of schools, announces three construction projects amounting to \$250,000. Eight rooms will be added to the Thomas Jefferson School and probably seven rooms to the John F. Nuner School; both will be work relief projects. Final approval has not yet been received for the new Marquette Elementary School building.

IOWA

Denison.—The Denison school district will vote this month on the construction of a schoolhouse to cost \$125,000.

Iowa City.—Academic work at the

University of Iowa was done by 2,564 students in the first term of the summer session, the enrollment being a 16 per cent increase over the previous summer. The graduate college had 1,590 students enrolled.

Tipton.—The first high school in Iowa was established in this Cedar County town. In 1858, thirteen of the original pupils finished the new course of study. Tipton's high school was established the same year that similar institutions opened in Chicago and St. Louis.

KANSAS

El Dorado.—Tentative plans for a new building on the high school grounds have been prepared by Thomas Williamson & Company, Topeka architects. It is proposed to replace the present McKinley Building to conform architecturally with the new building to be erected. J. F. Hughes is superintendent of schools.

Lawrence.—The 1935-36 budget issue of the *Lettergram*, the official monthly mimeographed publication of the Lawrence public school system, covers seventy-one pages. Graphs, illustrations and general format make this large issue most readable.

MICHIGAN

Traverse City.—PWA approval is being sought for a \$265,000 loan and grant for a junior high school. The project has been approved by the finance division of the PWA, and it is believed that final approval is assured.

Ann Arbor.—A University of Michigan budget for 1935-36 of \$7,877,550.72, an increase of approximately \$800,000 over 1934-35, was approved by the regents at a recent meeting. No blanket restoration of salaries will come from the increase, which will be largely spent to rehabilitate several departments whose activities were curtailed during the last few years.

MINNESOTA

Minneapolis.—The board of education has voted to ask the board of estimate and taxation for \$563,500 for the construction of additions to two junior high schools and for a new grade school building, provided a full grant from the federal government does not materialize.

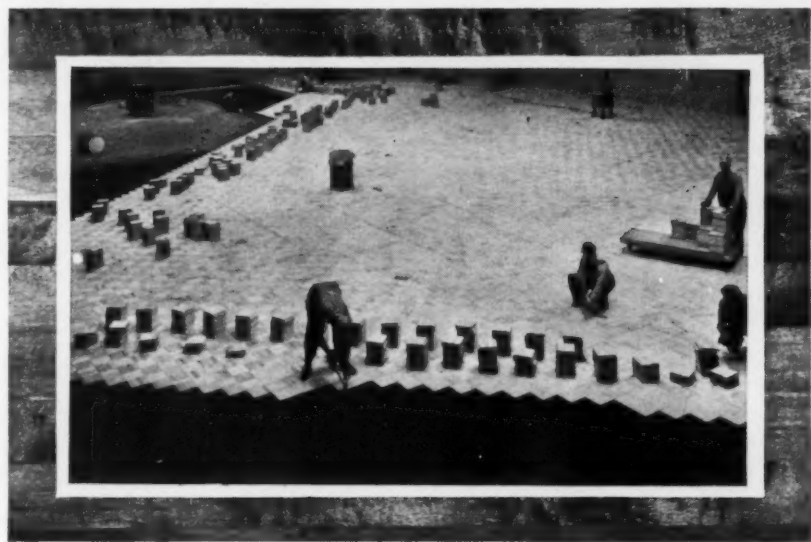
OHIO

Chillicothe.—Richards, McCarty and Bulford, architects of Columbus, have been engaged to prepare plans for a new district high school here.

WISCONSIN

Elk Mound.—A June graduate of the high school, Paul Bleiler, won a four-year scholarship in the college of his choice against 30,000 contestants in the national high school essay contest on "The Value of Time in Education" sponsored by Thomas J. Watson, president of International Business Machines Corporation. Bleiler, a minister's son, has been planning to attend North Central College, Naperville, Ill.

University of Minnesota
Indoor Sports Building



Clarence H. Johnston,
F.A.I.A., Architect
St. Paul, Minnesota

COLLEGE STARS *Influence Choice of* HARD MAPLE FLOORS *for* Minnesota Sports Building

Few problems in school construction require deeper consideration than that of selecting the material for floors. How will the flooring affect school room routine—the health and efficiency of pupils? Will it be an economy over a period of years? How easily can it be kept clean? Will it provide firm anchorage for desks? Will it simplify or hinder other construction work? These are some of the questions that must be asked—and answered.

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Architect

tionally easy to keep clean. Its smooth surface offers no lodging spaces for dirt and dust.

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Connor Lumber & Land Company	Laona, Wis.
(Sales Office, Marshfield, Wis.)	
Cummer-Diggins Company	Cadillac, Mich.
Farrin Lumber Co., M. B.	Cincinnati, Ohio
Holt Hardwood Company	Oconto, Wis.
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Kneeland-Bigelow Company	Bay City, Mich.
Mitchell Brothers Company	Cadillac, Mich.
Northwestern Cooperage & Lumber Co.	Gladstone, Mich.
Oval Wood Dish Corp.	Tupper Lake, N. Y.
Robbins Flooring Company	Rhineland, Wis.
Sawyer Goodman Company	Marinette, Wis.
Stephenson Company, I.	Wells, Mich.
West Virginia Pulp & Paper Co.	Cass, W. Va.
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Film Library Announced by Modern Art Museum

A grant from the Rockefeller Foundation, to be met by a like sum raised by private subscription, will finance for the first year the new Modern Art Film Library Corporation which has been established by the Museum of Modern Art, New York City.

The corporation, of which John Hay Whitney is the head, will assemble outstanding motion pictures made since 1899. These will be edited into a series of eight two-hour programs, it is understood, which will be rented to schools and museums. The project is expected to be self-sustaining after the second year, a grant for which is anticipated.

Films will be assembled from the governments of foreign nations as well as from American producers. To protect their commercial value, no film will be shown until two years after commercial showings have concluded.

Exchange centers will be established in Chicago, San Francisco and Los Angeles, according to the plan, to supplement the work of the center in New York.

In addition to the film library, a collection will also be made of books and periodicals on motion pictures. "Stills" from old pictures and musical scores issued to accompany silent films will also be collected.

Iris Barry will be curator of the film library.

How Chicago Schools Are Equipped With Visual Aids

Slides numbering 637,803 and 35,753 films were distributed to Chicago public schools during the school year just closed, according to Paul G. Edwards, director of visual instruction.

The slide and film circulating library in the Chicago school system contains 3,000 reels of 16-mm. silent motion pictures and 500,000 colored stereopticon slides. Subjects covered include art, music, children's literature, geography, history, nature study, botany, zoology, chemistry, physics and industrial processes.

The visual instruction department places in the schools, according to the number of pupils enrolled, its 1,000 slide projectors. It also has 325 silent film projectors out on loan. The city's three junior colleges each have one 16-mm. sound projector, in addition to silent equipment. Sound machines and films are acquired on a rental basis. Other projection equipment is owned by the department.

The central library of slides and films circulates its material on a weekly loan basis. Direct delivery is made once each week by a commercial package delivery firm which is paid according to the weight of the material delivered. Fifteen distributing

centers located in outlying neighborhoods throughout the city make the delivery problem simpler.

One Summer School Had Increase of 200 Per Cent

A 200 per cent increase in attendance was a feature of the DeVry Summer School of Visual Education held at the Francis W. Parker School, Chicago, June 24 to 28.

The total registration was 235 and included a greater proportion of school executives — superintendents, principals and directors of visual education — than it did of regular teachers. All parts of the United States were represented, as well as Canada.

The advertising group showed the outstanding industrial films of the year, and gave the conference data on methods of production and distribution.

A surprise feature was the showing of amateur films produced by the attending educators. An amateur educational film contest may be conducted next year. The equipment novelty was a new 16-mm. sprocket intermittent projector.

Pupils Write and Produce Movie

Tenth grade pupils of the Lincoln School, Teachers College, Columbia University, wrote, acted and produced a one-reel melodrama of the Stone Age recently. It was titled "The Brothers of Altamira," the story being based on drawings found on the walls of caves near Altamira, Spain, the earliest known examples of art. The project integrated art, history and English. The entire production cost only \$50, including the scenery.

"William Tell" Setting Authentic

"William Tell," a new seven-reel sound picture suitable for school use, is announced for exclusive release in 16-mm. size by the Bell & Howell rental library. The picture was produced in its entirety in the Swiss Alps, and staff members of the Swiss National Museum at Zurich are said to have spent months of historical research in recreating the details of life and customs of the day. Hans Marr plays the name part; Conrad Veidt is the vicious Gessler, and a noted European boy actor, Detlef Willecke, portrays the part of William Tell's son. The dialogue is in English.

Films for the School Screen

Travel in U. S. Territories

Hawaii the Beautiful — Famous places on the Islands, and the most important industries carried on there. 1 reel. 16 and 35 mm., silent. Released by Pathe Exchange, Inc., and Educational Films Corporation. Distributed by Films of Commerce Co., Inc., 35 W. 45th Street, New York.

Alaskan Adventures — Experiences of two daring explorers who penetrated the great Alaskan wilderness with no weapons save bow and arrow, and who lived on what they killed of necessity while they secured shots of events and scenes never before photographed. 2 reels. 16 mm., silent. Edited Pictures System, Inc., 330 West 42nd Street, New York City.

Alaska — Depicts the scenery, industries and life of Alaska; gold mining, salmon fishing, seal hunting, whaling, native life and schools. 1 reel. 16 mm., silent. \$24. Teaching Films Division, Eastman Kodak Company, Rochester, N. Y.

Panama Canal — Bird's-eye view of the Canal Zone; animated technical drawings explain operation of the locks; ship passes through canals. 473 feet. 16 mm. and 35 mm., silent. Bray Pictures Corporation, 729 Seventh Avenue, New York City.

Highway Glimpses of Panama — Business activity of the streets of the new city of Panama contrasted with

the ruins of old Panama laid waste by the buccaneer and free-booter, Sir Henry Morgan, and the rural road development of the republic. 2 reels. 16 mm., silent. Transportation charges only. Division of Motion Pictures, U. S. Department of Agriculture, Washington, D. C.

The Philippine Islands — Pictures Manila; a sugar plantation; gathering, husking, chopping and drying coconuts; growing, threshing, hulling and polishing rice; preparing abaca stalks for hemp. 1 reel. 16 and 35 mm., silent. \$24. Teaching Films Division, Eastman Kodak Company, Rochester, N. Y.

Puerto Rico — Indicates the development of this island under United States control and shows how location and climate make it a rich producer of agricultural raw materials. The films units are (1) San Juan; (2) schools and colleges; (3) rural life; (4) agricultural and industrial products. 1 reel. 16 mm., silent. \$24. Teaching Films Division, Eastman Kodak Company, Rochester, N. Y.

Our Newest Possessions (Virgin Islands) — Characteristic pictures of the Virgin Islands, with maps, panoramic views, life, customs and native types. Three films, 1 reel each. 16 mm. and 35 mm., silent. Bray Pictures Corporation, 729 Seventh Avenue, New York City.

News



Machines THAT CUT YOUR COSTS . . . THAT IMPROVE FOOD QUALITY

IMPORTANT INFORMATION about the newest, improved models of HOBART Electric Kitchen Machines . . . is contained in this folder. It gives up-to-date FACTS about the VITAL PART these machines play in present-day KITCHEN ECONOMY. It shows HOW each latest Hobart machine helps you realize the two-fold basis of *Successful*

Kitchen Operation—BETTER Food Quality and Reduced Costs. It tells the manifold advantages of HOBART Machines, designed and built by the World's Largest Manufacturer of electric kitchen machines.

Write for this folder. Here is the most timely information for everybody interested NOW in improving operation of school kitchens.



HOBART

DISHWASHERS

New "AM-5" is latest feature of complete line of DISHWASHERS for any school requirement. The "AM-5" is the ultimate in compact, high-speed, semi-automatic dishwashing equipment.

POTATO PEELERS

Right now the need for these machines is greater than for years. They peel just "Skin Deep" . . . no excessive peel loss. Available in both Bench Type and Pedestal Type, capacities from a peck to 50 lbs. potatoes quickly peeled.

SLICERS

Developed for Kitchen Use, with Kitchen Type Feed Trough. New Metal Finish resists staining and tarnishing. New Type Sharpener prolongs life of knife. Adjustable Pressure Feed.

MIXERS

Model A-150 Mixer, 15 Qt. bowl capacity, is the newest Hobart success. Wide range of other models, with Bowl Capacities of 3, 5, 10, 12, 15, 20, 30, 40, 60, 80 and 110 quarts. Exclusive Hobart Air Whip Attachment fits various sizes . . . of Great Advantage in many regular Bowl Operations . . . supplies aeration.

HOBART GIVES MORE FOR THE DOLLAR

FOOD CUTTERS

Split seconds in chopping up meats, vegetables, fruits, nuts and other foods. Adapt themselves to big, steady jobs, or to the many small tasks.

AIR WHIP UNIT

THE new and better way to WHIP CREAM, for generous servings on salads and desserts. Three or more quarts of delicious whipped cream from 1 quart of liquid cream. Also available as Attachment for Hobart Mixers.

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☐ Potato Peeler ☐ Air Whip ☐ Air Whip Attachment for Hobart Mixer ☐ Slicer ☐ Food Cutter

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City and State.....

NAMES IN THE NEWS • • • • •

Eastern States

RALPH J. JENKINS, principal of the state normal school at Johnson, Vt., has been appointed principal of the Danbury State Normal School. Mr. Jenkins has served as president of the Connecticut State Teachers Association, the Connecticut Association of Public School Superintendents and the New England Teacher Training Association.

DR. RAYMOND A. PEARSON resigned the presidency of the University of Maryland on June 30 after an incumbency of nine years. Doctor Pearson was formerly president of Iowa State College. H. C. BYRD, the vice president of the university, has become the acting president.

MEYERS B. HORNER has been chosen superintendent of schools at Erie, Pa. He has been superintendent at Washington, Pa., during which time the district built and occupied a \$900,000 junior-senior high school building. The retiring superintendent at Erie is JOHN C. DIEHL.

DR. OTIS W. CALDWELL of Teachers College, Columbia University, has been made emeritus professor of education. Doctor Caldwell is general secretary of the American Association for the Advancement of Science.

DR. JOHN A. SCHAEFFER has been appointed president of Franklin and Marshall College, Lancaster, Pa., succeeding DR. HENRY H. APPLE, who held the post for twenty-six years. Doctor Schaeffer is the son of the first state superintendent of public instruction in Pennsylvania, the late NATHAN C. SCHAEFFER.

DR. ROBERT R. ABERNETHY took office on July 1 as superintendent of schools at Harrisburg, Pa.

The REV. ARTHUR A. O'LEARY has been made president of Georgetown University, Washington, D. C., as well as chairman of the board of regents. Father O'Leary, a member of the faculty since 1912, succeeds the REV. DR. COLEMAN NEVILS who had been retained in the post for a year beyond the traditional six-year tenure.

FRANK G. PICKELL, superintendent of schools, Montclair, N. J., has been awarded the degree of doctor of letters by Rutgers University. This honor was bestowed upon Mr. Pickell in recognition of the part he has played in the last twelve years in developing the school system of Montclair, N. J., also because of the distinction of being the thrice-named

president of the New Jersey State Teachers Association.

CHARLES B. BOYER, superintendent emeritus of the Atlantic City Public Schools, Atlantic City, N. J., died of heart disease at the age of seventy-four. Mr. Boyer became the first superintendent of schools in Atlantic City in 1904, which position he held until his retirement three years ago.

DR. ARTHUR T. JERSILD, associate professor of education at Teachers College, Columbia University, and research associate of the Child Development Institute there, has been named as consulting psychologist to the Columbia Broadcasting System. His work will be to assist in elevating the standards of children's programs.

RAYMOND E. CLAFLIN is the new head master of Keene High School, Keene, N. H., succeeding WILLIS O. SMITH, resigned. Mr. Claflin has been head master at Lebanon since 1922.

A. RUSSELL COLE has resigned after eight years as principal of the high school at Scituate, Mass.

DYKE L. QUACKENBUSH, principal of the Stonington High School, will succeed WILLIAM B. NOYES as superintendent of schools at Stonington, Conn. IRA E. CREELMAN, principal of the high school at Seymour, N. H., has been elected principal in Mr. Quackenbush's place. The newly created post of vice principal was given to MRS. LUNA A. COLVER.

ARTHUR B. WALLIZE has retired from public school service after thirty-three years, his resignation as principal of Edison Junior High School, Harrisburg, Pa., having been accepted. Mr. Wallize's career includes teaching and administrative positions in public and private school systems.

A. H. NORTON, the first president, after sixteen years of creative work in building Keuka College for Women, Keuka Park, N. Y., resigned in June because of ill health. The college has grown from thirty-six students to more than 200 since 1921.

JOHN E. LAPLANT is the new principal of Winthrop High School, Winthrop, Me., succeeding C. H. ARBER. He has been head of the junior high school department for three years.

STANLEY LUTHER CLEMENT is the new principal of Howland High School near Bangor, Me.

DR. BYRON K. HUNSBERGER will begin in September his final year as principal of Rittenhouse Junior High

School, Norristown, Pa. Doctor Hunsberger's retirement at the age of 62 is in line with the board's present policy of retiring all school employees as soon as they are eligible for retirement allowance. He was once principal of the American Mission High School in Bombay, India.

DELBERT C. FULLER has accepted the superintendency of schools for North Tarrytown, N. Y. He was formerly supervising principal at Mount Morris, N. Y. He began his new duties July 1.

RICHARD HUGHES, a member of the faculty of Torrington High School, Torrington, Conn., has been named principal of the school. He succeeds FRANK M. JEFFREY.

DR. JOHN CARE DUFF of Pittsburgh has been appointed principal of the Edgemont School, White Plains, N. Y., succeeding DR. WHIT BROGAN.

CHARLES A. KEELER, for the last eighteen years superintendent of the Lyman School for Boys, Westboro, Mass., will retire August 1. He will be succeeded by CHARLES A. DUBOIS, master of Williams School, Chelsea, said to be the largest elementary school in the state. Lyman School is a state training school and its work is of a correctional as well as an educational nature.

MARGARET T. ALTON has resigned the position as principal of the Lansingburg Junior High School, Troy, N. Y., to assume full-time duties as field worker for the Troy Orphan Asylum.

WILBUR F. BOLEN has been appointed principal of the new six-year high school at Dunellen, N. J.

ELWIN TOWNE, a faculty member, succeeds MELVILLE J. JOHNSON as principal of the high school at Falmouth, Me.

HOWARD GORDON SPALDING for the past year principal of the high school at Lansdowne, Pa., has been made principal of the Borough School, North Plainfield, N. J. He succeeds HARRY L. STEARNS who resigned recently to accept the position of superintendent of schools at Woodbury, N. J.

DR. HENRY ROBBINS BARROWS, associate professor of education, New York University school of education, and author of several books on biology, died July 16.

HARRY DAVISON has been elected principal of the Whyel School in Uniontown, Pa.

JOSEPH A. HANIPHY, for the last twenty-seven years principal of the John Ericsson Junior High School, Brooklyn, N. Y., died following an operation at the age of 64 years. Mr. Haniphy was one of the founders of



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You are invited to PROVE THIS—at our expense!

THE comparative test figures, shown above, give only one of the reasons why it will pay you to thoroughly investigate Palmolive "Measured Soap." For, in addition to saving you up to 50% on soap costs, this newest dry soap dispensing system has two other distinct advantages.

First, there's the soap. It's Palmolive, the world's favorite toilet soap, in a new free-flowing form that lathers with amazing speed! It cleanses quickly and thoroughly, yet gives your students' hands and faces the full protection of Palmolive's special blend of olive and palm oils.

Second, there's the dispenser. It is the last word in sanitary washroom soap control. Big, sturdy, leak-proof and tamper-proof—it is made to order for school installation.

But why not prove to yourself, at our expense, how "Measured Soap" can help you cut down the cost of healthful cleanliness in your schools.

Let us make a trial installation that won't cost you a cent. Fill in and mail the coupon today.



No soap waste with this dispenser. Two plunges measure just enough for one wash... no more!

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THE NEW, ECONOMICAL
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CITY..... STATE.....

the Brooklyn Teachers Association and its president for two years.

JOSEPH M. SCHNITZER has been appointed superintendent of schools at Catskill, N. Y., to succeed JOHN T. KAEMMERLEN, who resigned to accept a similar position at Haverstraw, N. Y. Mr. Schnitzer has been director of elementary schools in Catskill.

DR. SAMUEL E. SHULL, superintendent emeritus of Perth Amboy schools, Perth Amboy, N. J., died at the age of 76. Doctor Shull served thirty-five years as superintendent at Perth Amboy before retiring in 1930.

Southern States

DR. JAMES E. ALLEN has been elected president of Marshall College, Huntington, W. Va., to succeed DR. MORRIS P. SHAWKEY who recently resigned after twelve years in the office. Doctor Allen has been president of Davis and Elkins College, West Virginia, for twenty-five years.

LLOYD L. SHRIVER, retiring superintendent of schools at Grafton, W. Va., has joined a Ford agency as salesman.

JOHN D. RIDDICK has resigned the principalship of George Washington High School, Danville, Va., after nine years, to become principal of Jefferson High School, Roanoke, Va.

F. W. SCOTT has moved to Flemingsburg, Ky., where he will be superintendent of schools.

O. G. SCHUBERT has resigned as superintendent of White Oak schools to become superintendent of the Delaware Consolidated School, Nowata County, Oklahoma.

W. CLARK SIMPSON is the new superintendent of Carrollton High School, Carrollton, Miss.

J. L. SOLLEY, principal of the Arab High School, Marshall County, Alabama, has been elected principal of Glencoe High School, Gadsden, Ala.

MARVIN P. MANTEL has been chosen superintendent of schools at Greenville, Ala. He succeeds MITTIE WRIGHT, who after thirteen years of administrative work requested that she be allowed to become an elementary teacher in the school system.

GEORGE W. WANNAMAKER has accepted the superintendency of the Glynn County schools at Brunswick, Ga., having resigned his position as superintendent of the Griffin public schools.

R. L. CONLEY, after five years as superintendent of Ridgely schools, Ridgely, Tenn., has resigned to become educational field representative of the state department of game and fish. He will visit schools and civic organizations and lecture on wild life conservation.

LOUIS CLIFTON has been named head of the University of Kentucky extension department. He was formerly principal of the Dry Ridge and Bellevue high schools, Kentucky, and since 1926 has been a member of the university extension department as assistant director and acting director.

A. J. PARR will succeed R. P. BOWMAN as principal of Linville-Edom High School, Rockingham County, Va. Mr. Bowman has resigned to study for a doctorate at the University of Virginia. Mr. Parr's old post as assistant principal at Elkton High School will be taken by ALFRED DUFFLEMYER.

J. D. WILLIAMS, until recently principal of the Norris, Tenn., High School, has been appointed supervisor of the University of Kentucky High School, taking the place of SHERMAN G. CRAYTON, whose resignation will become effective at the conclusion of the summer session.

T. E. STORY has been reelected superintendent of the Wilkesboro Central School District and principal of the high school at Wilkesboro, N. C., for the twelfth consecutive year.

WILLIAM E. RAMSEY has been chosen by the Lincoln County board of education, Kentucky, as principal of the Broughtontown School to succeed F. N. McWHORTER, new head of Crab Orchard School.

W. E. NEWBOLT, for five years principal of the graded and high school, Berea, Ky., has resigned. He will teach at Berea Academy.

L. S. MICHAEL is the new principal of the Parkersburg Central Junior-Senior High School, Parkersburg, W. Va., following the resignation of E. E. CHURCH.

Western States

R. L. MARKLEY has been appointed commissioner of education of Wyoming. He has been superintendent of schools at Thermopolis, Wyo. He succeeds W. B. MCINTOSH.

DR. WALTER C. EELLS has been granted a year's leave from his professorship of education at Stanford University to become coordinator for the National Cooperative Study of Secondary School Standards. PROF. E. D. GRIZZELL, University of Pennsylvania, is chairman of the study committee. National headquarters of the committee will be established in Washington, D. C. in September.

DR. GEORGE ALLEN ODGERS on July 1 assumed his new duties as president of Gooding College, Idaho, a post left vacant by the resignation of DR. CHARLES W. TENNEY. Doctor Odgers has been director of personnel and professor of education at Pacific University, Forest Grove, Ore.

DR. FREDERICK M. HUNTER, chancellor of the University of Denver since 1928, has accepted a position as chancellor of the Oregon educational system. He will assume his new duties on September 1.

C. LELAND RICHMOND of Walla Walla has been appointed superintendent of the State Training School for Boys at Chehalis, Wash. He succeeds JOHN C. KELLY, JR., Tacoma, who resigned to enter teaching.

FRANCIS OAKBERG has been named principal of Wells High School in Elko County, Nevada, filling the vacancy caused by the resignation of GEORGE REHM shortly after his appointment was made.

JOHN METCALF, superintendent of schools at McCammon, Ida., has resigned to accept a similar position at Afton, Wyo. Mr. Metcalf will be succeeded by DAVID THOMAS, the football coach at McCammon.

The newly elected superintendent of schools at Long Beach, Calif., is WILL FRENCH of Tulsa, Okla.

DR. C. A. HOWARD, superintendent of public instruction in Oregon, has general charge of the recreation program now being conducted in seventeen Oregon cities through the employment of recreation workers through relief funds.

Middle Western States

FRANK A. JENSEN, superintendent of schools at Rockford, Ill., has been elected superintendent of the La Salle-Peru Township High School and Junior College, La Salle, Ill., succeeding FRED G. STEVENSON, resigned. ELLIS U. GRAF, former principal of Rockford High School, has been named as Mr. Jensen's successor.

DR. FREDERICK A. MIDDLEBUSH has been named president of the University of Missouri, succeeding DR. WALTER WILLIAMS, noted educator in journalism and head of the university for five years. Doctor Williams, who has been in ill health for some time, will continue as dean of the school of journalism.

DR. DUGALD CALEB JACKSON, JR., will assume the directorship of Lewis Institute, Chicago, following the resignation of DR. GEORGE NOBLE CARMAN. Doctor Jackson was formerly head of the engineering departments at the University of Kansas and at the University of Louisville. He is the son of Dr. Dugald Caleb Jackson who retired in June as head of the electrical engineering department of the Massachusetts Institute of Technology.

H. E. BINFORD has been elected superintendent of schools at Bloomington, Ind., succeeding W. H. Vogel. Mr. Binford was a former high school

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New, Large
or Small...**

*Accurate Temperature
and Greatest Economy
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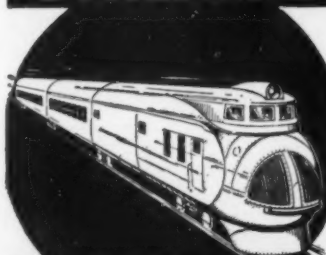
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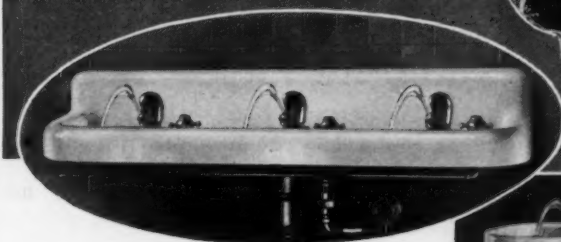
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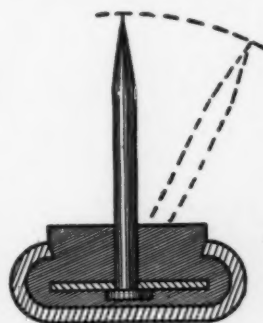
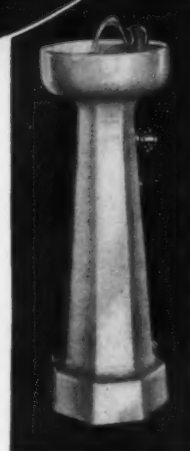
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Dotted lines indicate degree to which chair may be tilted while glide remains flat on the floor. The Rubber Cushion absorbs all noise, and washer prevents nail from pulling out.

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principal in Bloomington before going to Louisville, Ky., where he was high school principal and lately assistant superintendent in charge of junior and senior high schools.

ELDON C. GEYER, director of public school research and special education, has been elected superintendent of schools at Battle Creek, Mich. DR. W. G. COBURN's resignation from the post took effect July 1 after forty years' service in the capacity of school superintendent.

ROSCOE PULLIAM, superintendent of schools at Harrisburg, Ill., since 1927, has been appointed to the presidency of the Southern Illinois State Normal University at Carbondale. The appointment fills the vacancy caused by the recent death of DR. HENRY R. SHRYOCK.

P. C. BUNN has been appointed superintendent of the public schools of Lorain, Ohio. He fills the vacancy left by the death on May 25 of D. J. BOONE, who had served as superintendent for twenty-one years.

DR. LOUIS ROUND WILSON, dean of the Graduate Library School of the University of Chicago, was elected president of the American Library Association at its meeting in Denver in late June.

HAROLD L. RICHARDS has been appointed superintendent of the high school system at Blue Island, Ill. He follows J. E. LEMON who is retiring after forty-one years' service.

DR. LEMUEL HERBERT MURLIN, president of three universities during his career as an educator, died in Wayland, Mich., after a brief illness at the age of seventy-three years. Doctor Murlin was president of Baker University at Baldwin, Kan., from 1894 to 1911; president of Boston University from 1911 to 1925, and president of DePauw University at Greencastle, Ind., from 1925 to 1928.

DR. C. A. PHILLIPS has been serving as acting director of the summer session at the University of Missouri. Doctor Phillips is director of the University Elementary School and a professor of education in the university.

J. IVAN NIERGARTH is the newly elected superintendent of schools at Cass City, Mich. He is at the University of Michigan this summer taking work for an advanced degree.

The new prior and principal of St. Thomas High School, Rockford, Ill., is the REV. JOHN F. SEARY, former assistant principal of St. Ritas High School, Chicago.

CHARLES J. THOMSON, head of the school system at Brown City, Mich., for the last twelve years, has accepted the position of superintendent of Davison High School, Davison, Mich.

DR. EDWARD McLAUGHLIN, principal of the Dewey Grammar School, Chicago, from the time the school opened in 1910 until his retirement in 1923, died recently at the age of eighty-two years. Doctor McLaughlin was once a practicing physician, a graduate of Rush Medical College.

L. X. JOHNSTON, Lisbon, Ohio, has been elected county superintendent of schools of Carroll County, Ohio, to succeed SAMUEL H. LEIPER, who died of pneumonia in May at the age of 38 years. Mr. Johnston has been assistant county superintendent of Columbiana County, Ohio, for the last five years.

JESSE B. COONS of Grant, Iowa, is a superintendent during the school year but a mayor during the summer. He was elected 1935 mayor of the summer session "tent city" at the University of Iowa. He serves a population of a little more than 100 citizens.

HERBERT L. KLINGBEIL, superintendent of schools at Basco, Ill., has been appointed superintendent at Colchester, Ill., to fill the vacancy made by the election of C. C. McCORMICK as county superintendent of schools.

RAY M. KITCHEN succeeds ALBERT B. DAVIS as superintendent of schools at Stoutsville, Ohio. Mr. Davis will be superintendent at McArthur, Ohio.

E. D. JARVIS, superintendent of schools at Fort Recovery, Ohio, has been appointed superintendent of schools at Perrysburg, Ohio.

G. R. PATTON, superintendent of schools at Hyatts, Ohio, has resigned to take over the same position at Waynesfield, Ohio.

ORAN I. BROWN, principal of the high school at Osgood, Ind., is to be the new superintendent of schools at Milan, Ind.

R. L. CLEVELAND, principal of a school at Rensselaer, Ind., has been appointed superintendent of schools for that city.

The REV. JOHN HARRIS, principal of St. Ritas High School, Chicago, for the last six years, has gone to the St. Nicholas of Tolentine convent, New York City, as prior. The REV. RUELAN FINK, former prior of Cascia Hall, Tulsa, Okla., will take over Father Harris's former position.

RICHARD CRONEIS has been elected superintendent of Whetstone schools near Bucyrus, Ohio. C. F. ROST, former superintendent, takes a similar position at Old Fort, Seneca County, Ohio.

JOHN F. KOEPPE, superintendent of schools, at Aurora, Ohio, has been elected head of the school system at Berea, Ohio, to succeed A. G. YAWBERG.

ADEN H. KELLUMS has been appointed superintendent of schools at Kincaid, Ill.

J. S. BARRINGTON will receive the appointment of superintendent of schools at New Washington, Ohio, if he can be released from his contract with the school board at Chatfield, Ohio.

M. L. MCCOY, superintendent of schools at Lennox, S. D., has been elected to the superintendency of the public schools at Iron River, Mich., upon the retirement of FRANK HENDRY.

LAWRENCE F. KRUEGER, principal of the high school at Flat Rock, Mich., is the new superintendent of schools at Grosse Ile, Mich. He succeeds CHARLES E. BRAKE, who has become deputy school commissioner of Wayne County.

CAROL EDWARDS, teacher of social science in the Solon High School, has been appointed superintendent of schools at Solon, Ohio. CLAUDE NASH has been promoted from the principalship to the superintendency of the Orange, Ohio, schools, succeeding T. W. WICKHAM, now assistant county superintendent.

C. J. HANCOCK, superintendent of schools at Hewitt, Minn., died on June 26 of gunshot wounds received when he surprised two burglars robbing his garage. Before his death he identified a photograph of one of his assailants.

CARL ROBERT of Sygnet, Ohio, is the new superintendent of Birmingham School near Lorain, Ohio.

L. J. SMITH has been named superintendent of schools at Massillon, Ohio. Mr. Smith has been superintendent of the Stark County schools for six years. He has signed a three-year contract.

E. V. SHARP of Fountain City, Ind., assumes his new duties as principal of the high school at Boston, Ind., in September. He succeeds AARON LINDLEY, recently resigned. Mr. Lindley is to be superintendent of schools at Crown Point, Ind.

MERRILL FULLMER has been elected superintendent of the Augusta Community High School, Augusta, Ill.

B. I. BRADY, former assistant superintendent of schools, Auburn, Ohio, has been elected superintendent, succeeding J. G. CROWE who has resigned to take a similar position in Chester, Ohio.

WILLIAM A. BAKER of Buckskin, Ind., has accepted the position of high school principal and basketball coach at Alamo, Ind.

WARREN W. COY will take over the superintendency of schools in Fort Recovery, Ohio, this summer.

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**CLEAN
SCHOOLS**



Keep the school floors clean and the rest is easy. For it is the floor that receives a new layer of incoming dirt every day. It also receives all the dust that settles in the room. Dirt and dust is redistributed from the floor unless it is removed frequently and thoroughly down to the last crevice and corner.

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They save cleaning time and do better work than can be done by hand methods.

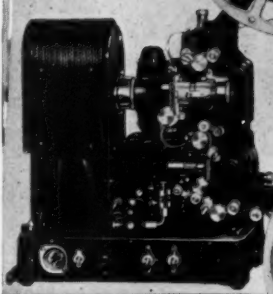
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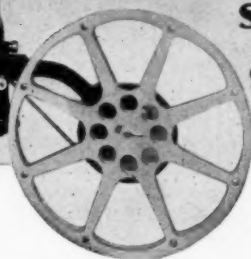
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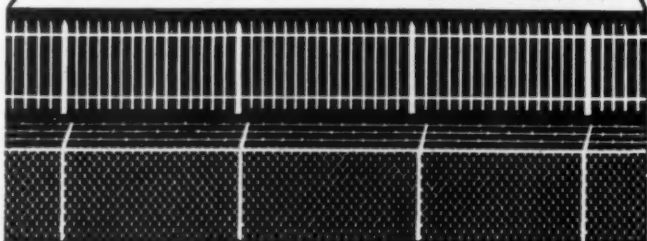
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After years of unrelieved recumbency, the school desk drawer has suddenly flopped over on its side. In its new position it becomes a vertical book file.

Equipment engineers now and then get ideas of just such exciting simplicity. With the desk drawer turned over, plenty of knee space is left, the desideratum of pupils with lengthening legs. Moreover, in opening this side drawer, all scraping and moving of chairs is obviated. For less commotion, even a progressive school head must sometimes pray.

Standard School Fixture Co., Grand Rapids, Mich., introduces this new "classroom efficiency" desk in several neat models, supplementing it with modernized posture chairs.

Stage and Screen

Broadway and Hollywood suck their talent from the high schools. Boys and girls feel the emotional response of a school audience and their dream is to recapture it from a wider public.

An administrator may not regard his high school as a prep school for stage and screen, but if he is human at all he takes pride in the school's well equipped stage. A stage, of course, is not well equipped unless safety is the prime factor in the equipment. Vallen, Inc., Akron, Ohio, can add security to the school stage with its all steel, noiseless curtain track.

Symbolism

Six little symbols tell the story. They represent warming, cooling, humidifying, dehumidifying, circulating and cleaning. Automatic control of these processes makes satisfactory air conditioning possible. That's the gist of it.

"This Thing Called Air Conditioning" is a neat little book, not to be reviewed with the others on the next page because it is put out by a manufacturer, the Minneapolis-Honeywell Regulator Company, 2820 Fourth Avenue South, Minneapolis. The company does not make or sell air conditioning apparatus, so it feels its book is without prejudice for or against any one system. Its interest is in automatic control, in which it has pioneered for fifty years.

Is Stone Softer?

One thing that never lets you down is a hard maple floor. Foster School, Evanston, Ill., has a thirty-five-year-

old one which was scrubbed frequently and vigorously for many, many years. Nowadays we are being taught that scrubbing is just about the worst thing that can happen to a wood floor.

Reconditioned by a "heavy duty" finish, the Foster School floor is again ready for hobnailed traffic and is well on its way to fulfilling claims that it will outwear stone.

You need not be an architect in order to profit by the grading rules, standard specifications and data on laying and finishing hard maple, beech and birch floors just published by the Maple Flooring Manufacturers Association, 332 South Michigan Avenue, Chicago.

Punishment-Proof

They're kicked up and they're kicked down. Except in a private home that's about all they can expect. From the general public it is just one swift kick in the seat after another.

Few can take it. These few seem actually built for punishment. Abuse them as you will, they won't break under it. A perfect example is the toilet seat by Brunswick-Balke-Colender Co., 623 S. Wabash Avenue, Chicago. This concern says it takes a whale of a seat to stand public toilet abuse and so it presents the Whale-Bone-It. Because of its "cross-grain laminated construction, the seat is unbreakable, and, once installed, lasts forever."

Strong claims these, but a reputable concern is behind them. Many, many schools are behind them too, and millions of healthy little "behinds" testify to their sanitary construction.

Etiquette Hint

A dean of women says that she can tell the first week which freshmen girls at her college come from large families. They talk loud and fast; have always had to in order to be heard at all.

We question the reliability of this high sibling test. More than likely many of the noisiest are merely products of high school cafeterias, where to make themselves heard above dishes and din, girls must shriek and boys must shout.

In school cafeterias treated with Acousti-Celotex, that noise-absorbing finished surface for ceilings or walls made by the Celotex Company, 919 North Michigan, Chicago, pupils may eat their lunches in well mannered enjoyment. Try Acousti-Celotex in the lunchroom and watch the pupils go Emily Post.

Crossroads Music

A cornstalk fiddle and a shoestring bow once made the music of the crossroads. Now they listen to the pipe organ at Pretty Prairie School, if you please.

Pretty Prairie's isn't an ordinary pipe organ. It is the new electric organ invented by Laurens Hammond, president of the Hammond Clock Company, Chicago. The sound is that of a pipe organ, all right, but reeds, pipes and vibrating parts are missing. The sound begins electrically, and the organ can't get out of tune. It takes only about half the space of an upright piano and the price is within the reach of the Pretty Prairie P.-T. A.

George Gershwin has one too, and Sigmund Romberg. Schools all over the country are playing follow the leader.

Longevity Tables

For gentle handling and delicacy of attention, avoid gymnasiums and laundries. In virility rather than in fragility lies their charm.

Gym towels divide their lives between shower rooms and laundries, and it is not surprising that long life is not their characteristic.

When someone comes along with a gym towel that stands up under this hard way of life for an average of five years, he has something worth christening a "Super-Gym" towel. That is what Geo. McArthur & Sons, Baraboo, Wis., calls its heavy duty towels, many of which are said to continue in service for more than seven years.

Some 400 high schools and colleges have decided, after referring to the longevity tables, that these Super-Gym towels are the cheapest they can buy.

World With Fence

As to whether the world with a fence around it would actually satisfy some persons there is reasonable doubt. A good many school men, however, would live more contented lives if there were a good strong fence around the school grounds. Children at play simply will chase balls into streets and highways without thought of traffic.

Cyclone Safeguard Fence, made by the Cyclone Fence Company, Waukegan, Ill., is a wise defense against such heedlessness. A similar fence, with a top finish of three strands of barbed wire, called the Invincible, helps to solve the gate crashing problem at the school football and baseball field.

Summer is installation and replacement time for fences. The school world with a fence around it is none too exacting a demand to make, particularly for grounds adjacent to heavily trafficked highways.

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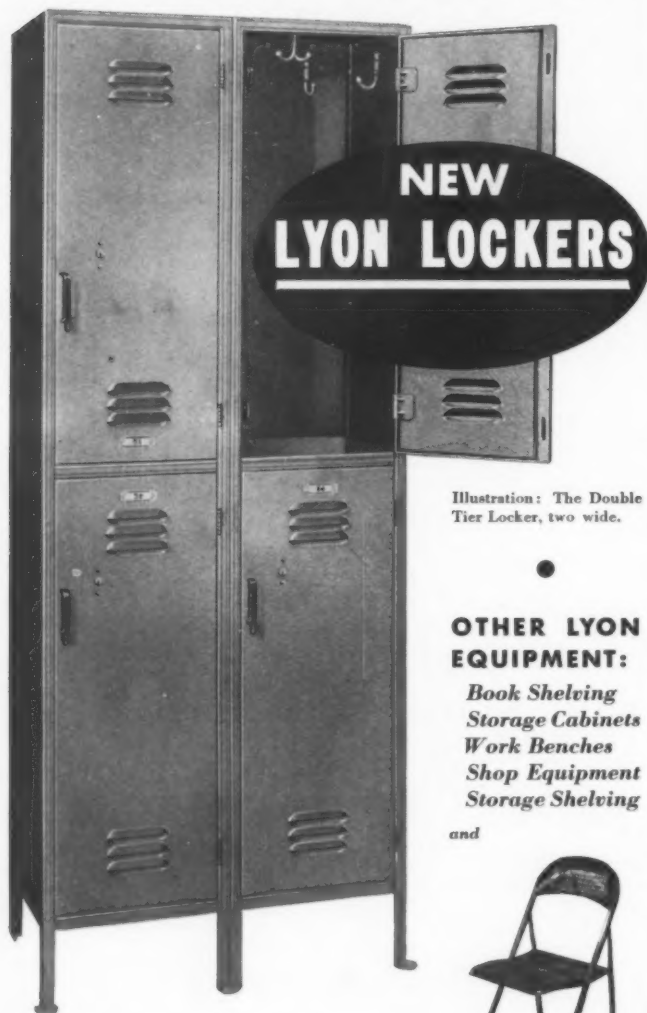


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DOCUMENTS OF AMERICAN HISTORY. Edited by Henry Steele Commager. Crofts American History Series. New York: F. S. Crofts & Company, 1934. Pp. xxi+504. \$4.00.

From the "privileges and prerogatives granted to Columbus" to the anti-war treaty of June, 1934, the author has made a wise selection in compiling 486 readings for students of American history. The new volume includes many items not usually found in the typical book of readings. Just as valuable for secondary school as for college.

CENTRALIZING TENDENCIES IN THE ADMINISTRATION OF PUBLIC EDUCATION. By George Drayton Strayer, Jr. Teachers College Contributions to Education, No. 618. New York: Bureau of Publications, Teachers College, Columbia University, 1934. Pp. vi+123. \$1.50.

Centralizing tendencies in three states are discussed. There appears to be little definite philosophy or general plan behind these movements and therein lies the danger. Worth reading.

STAMMERING AND ALLIED DISORDERS. By C. S. Bluemel. New York: The Macmillan Company, 1935. Pp. x+182. \$2.00.

In not too technical language the author presents his theory of stammering as conflict between conditioning and inhibition, citing experimental and clinical data, and suggesting therapeutic measures.

BIOLOGY FOR EVERYMAN. Volumes I and II. By Sir J. Arthur Thomson. New York: E. P. Dutton & Co., Inc., 1935. Two volumes, 1600 pages. Illustrated. \$5.00 complete.

One of the most complete and readable biologies written. Represents the research and compilation of one of Great Britain's foremost scientists. Covers many topics ordinarily omitted entirely or skimmed over in the ordinary book. Designed primarily for popular reading and as a general reference book. Particularly suited to secondary school libraries.

ORGANIZATION AND ADMINISTRATION OF SUBSTITUTE-TEACHING SERVICE IN CITY SCHOOL SYSTEMS. By Clare Charles Baldwin. Teachers College Contributions to Education, No. 615. New York: Bureau of Publications, Teachers College, Columbia University, 1934. Pp. vii+115. \$1.50.

National survey of methods and practices in the employment of substitute teachers. Author proposes standards for administration after study of 143 city school procedures.

WILLINGLY TO SCHOOL. By the staff of the Fox Meadow School. Photos by Wendell MacRae. New York: Round Table Press, 1935. Pp. 109. \$3.00.

Every school library should possess several copies of this remarkable pictorial presentation of what the new education means. The beauty of the book is that it tells a good story through pictures: the narrative is really secondary. The best pictures of child life yet published. Executives and teachers will find it of real value in social interpretation.

REDIRECTING EDUCATION. Vol. II, Europe and Canada. Edited by Rexford G. Tugwell and Leon H. Keyserling. New York: Morningside Heights: Columbia University Press, 1935. Pp. ix+285. \$3.00.

The second volume of a pair of excellent books on education. The new publication is concerned with up-to-the-minute descriptions of the educational systems in Germany, England, France, Russia, Italy, Denmark and Canada. Each of these national systems is capably covered and interestingly presented.

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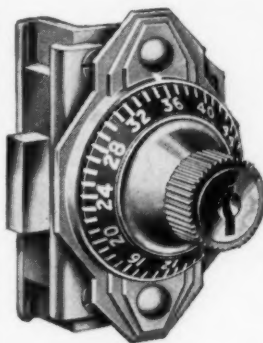
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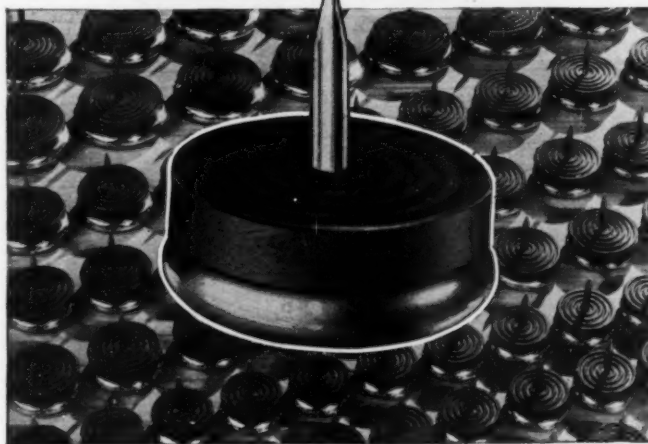
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TECHNIQUES OF TEACHER SELF PLACEMENT. A MANUAL OF EMPLOYMENT. By William A. MacDougall. Grand Forks, N. D.: Holt Printing Company, 1935. Pp. 243. \$1.90.

Painstakingly the author has brought together much information that is of real value to teachers when they are attempting to secure teaching positions. Intensely practical and realistic.

PROGRESSIVE METHODS OF TEACHING IN SECONDARY SCHOOLS. By Nelson L. Bossing. Boston: Houghton Mifflin Company, 1935. Pp. xvi+704. \$2.75.

Outgrowth of the author's experience in the University of Oregon, this added volume to the art of teaching is well balanced, catholic in scope and does not ride methodology hobbies. Fair presentation of all recognized methods is made. Well organized and easy to read. Training school text and also valuable for secondary school administrative library.

CAN ATTITUDES BE TAUGHT? By Arthur Lichtenstein. Baltimore: The Johns Hopkins Press, 1934. Pp. ix+89. Paper bound. \$1.25.

This monograph describes some research on scientific attitudes as developed in general science. It includes an excellent resumé of experimental attitude studies.

CHARACTER DANCES FOR SCHOOL PROGRAMS. By Hilda Clute Kozman. New York: A. S. Barnes and Company, Inc., 1935. Pp. 116. \$2.00. Illustrated.

These new character dances offer a variety of material ranging from the grotesque to the esthetic; from the solo type to ensembles of any number; from a "rube dance" to a stately minuet, and from an Indian Maidens' Thanksgiving dance to a Japanese parasol dance. The directions are clearly given and the music is well printed. Teachers of physical education will find it helpful.

BEFORE THE DAWN OF HISTORY. By Charles R. Knight. New York: Whittlesey House, McGraw-Hill Book Company, Inc., 1935. (Third printing.) Pp. xiii+119. Illustrated. \$2.50.

Indispensable for the secondary school social studies library. Unique account of the milleniums preceding man on earth. The sequential pictorial presentation of the artist's and scientist's reconstruction of these periods furnishes a most vivid book for adults as well as children. It fills a much needed gap in our record.

ENRICHED TEACHING OF ENGLISH IN THE JUNIOR AND SENIOR HIGH SCHOOL. By Mazie Nave Woodring; Ida A. Jewett, and Rachel Theresa Benson. New York: Bureau of Publications, Teachers College, Columbia University, 1934. Pp. ix+358. \$2.75.

Every teacher of English will covet this book at sight with its source material for thirty-four subjects ranging from spelling to vocational guidance. The annotated items, the cross-sectioning at the end of each section, and the highly usable index will convince him of the service and practicability of the book.

UNROLLING THE MAP: The Story of Exploration. By Leonard Outhwaite. New York: Reynal & Hitchcock, Inc., 1935. (A John Day Book). Illustrated with drawings by Gordon Grant, and 56 specially devised maps. Pp. xiv+351. \$3.75.

Quite the most complete chronological collection of explorations and explorers yet published, starting with Hannu, who discovered Punt in 2700 B.C., to the stratosphere flights of 1935. The author uses black and white in map form most effectively and progressively shows how discovery shortens the unknown. The story moves interestingly from an almost black to practically a completely white globe in less than 5,000 years. Gordon Grant has reproduced type boats from Egyptian times to the present. It is a piece of writing that will fascinate and hold the adolescent interested from the opening page to the last note. No secondary school library can be considered complete without this volume.



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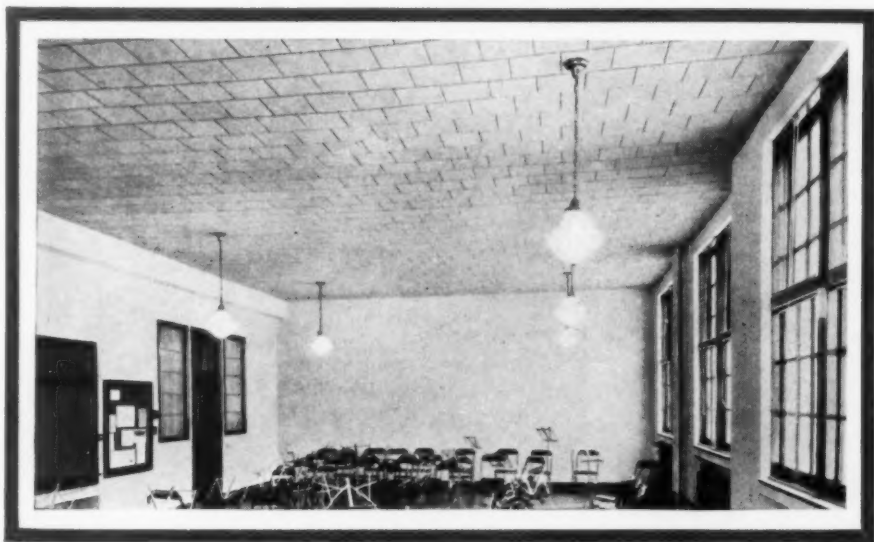
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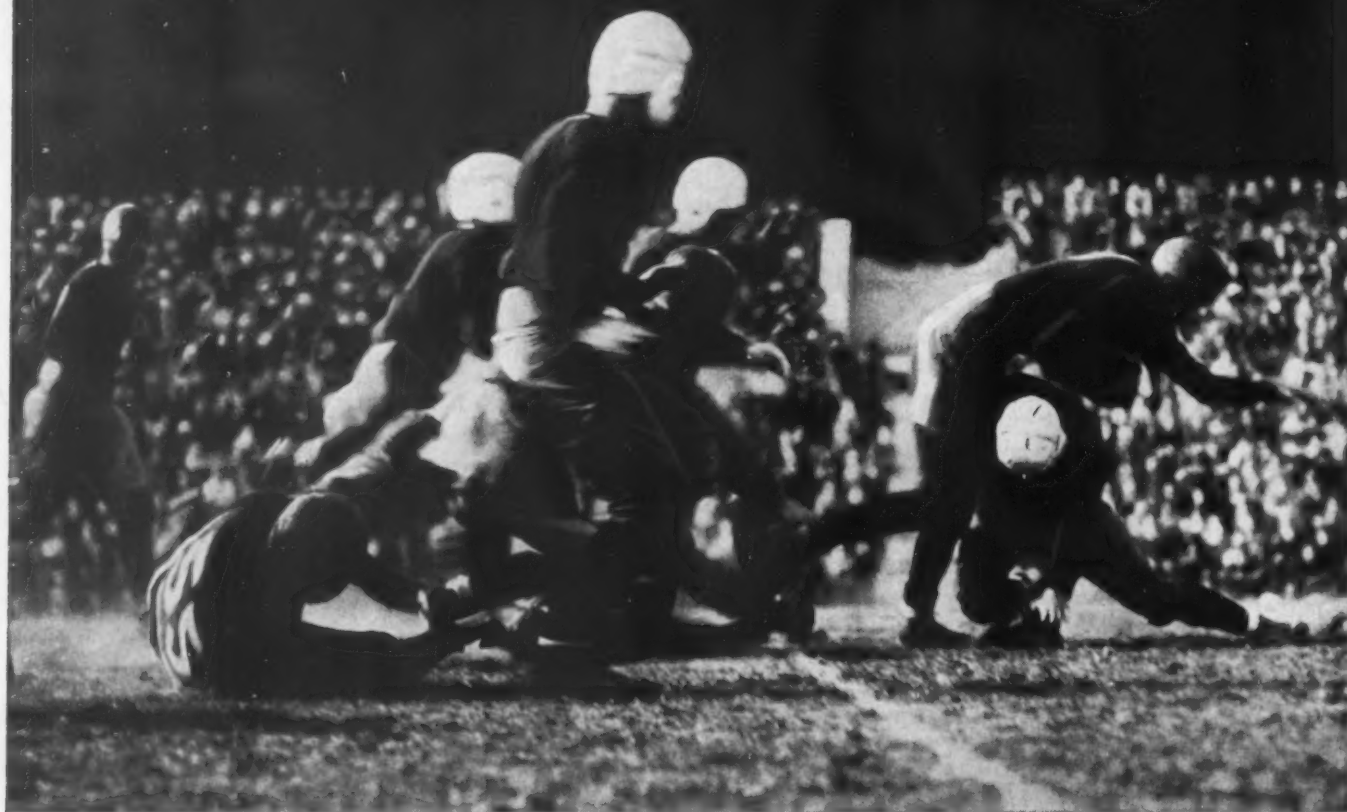
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